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**INDUSTRIAL AND AGRICULTURAL  
DEVELOPMENT OF INDIA  
SINCE 1914**



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# INDUSTRIAL AND AGRICULTURAL DEVELOPMENT OF INDIA SINCE 1914

*(A Study of Some Aspects of Economic History of India)*

By

**B. P. MAHESHWARI, M.A., M.Com., Ph.D.**

*Shyam Lal College,  
Delhi University.*

*with a Foreword by*

**Hon'ble Shri JAGJIVAN RAM**

**MINISTER OF DEFENCE,  
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## FOREWORD

The political emancipation the process of which set in the year 1947 and culminated in the achievement of full freedom in 1950 under the aegis of the Indian National Congress, threw up in its wake many of the dormant socio-economic problems besides bringing new ones. Despite the unprecedented magnitude of the problems resulting from the partition and the creation of Pakistan, we formulated a positive policy of planned economic development for our vast country, a country inhabited mainly by vast mass of Backward Class people consisting of those engaged in the traditional village and small industries, landless agricultural labour, untouchables, tribals as well as small farmers spread over in millions of villages.

No doubt, the country has been able to make fairly rapid progress in all spheres, but the rate of progress has not been as rapid as we wanted in the context of our very low standard of living and rising population.

We are determined to continue our march towards socialism, to attain equality of status and opportunity and fraternity assuring the dignity of the individual based on guaranteed social justice by eliminating all discriminatory monopolistic traditions in social and economic field including agrarian reform to accelerate efforts to meet the basic needs of our people by equitable distribution of the wealth produced to provide fresh avenues of employment and the like. A strong nation cannot be built unless poverty has been banished and disparities diminished. We wish to achieve the ideals of progress and social justice within the parliamentary framework instead through violent revolution.

Dr. B.P. Maheshwari of the Delhi University, who has made a valuable academic contribution to the understanding of our progress both in agricultural and industrial sectors during the last 50 years, deserves congratulations. It is now well recognised that the study of socio-economic problems in a historical perspective can provide useful guide-lines for future.

This study will prove useful not only to the planners and economists but also to all those who may be interested in understanding the development of our economy.

JAGJIVAN RAM



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## PREFACE

The study of economic history has been receiving increasing attention in the western countries as it is being felt that the study of economic problems in historical perspective can help in their better understanding and may provide useful guide-lines for the future. In our country the study of this subject has not attracted the desired attention. Nevertheless, useful work has been done by some scholars particularly Romesh Chand Dutt, Radhakamal Mukherjee and D.R. Gadgil. In recent years, attempts have been made by some scholars to trace the economic systems of ancient India as well. But the amount of literature available on the subject is still scanty and requires the ingenuity of many more workers on the subject. There was special lacuna in the study of economic history after the First World War. A number of writers who have written books on economic development have not given comprehensive account from the historical point of view.

The present study attempts to fill this void in the economic history of the country. The study has been divided into two parts. The first part covers the period beginning from the First World War to 1947 when the country attained Independence. Second part deals with post-independence period. The introductory chapter in part I describes the important events from the beginning of the British rule in the country up to the time of First World War and provides the necessary background for the proper appreciation of the problems connected with the period chosen for this study. The discussion in part I has been further divided into 2 parts—and the World depression has been taken as a dividing line. In part II, the first chapter deals with the economic and political events which took place between 1947 and 1950 and thus stands out as a dividing line between the pre-independence and post-independence periods. The discussions in the remaining chapters of part II relates to the period of Five-Year Plans from 1950-51 to 1965-66. The concluding chapter summarises the achievements of the post-independence period and also attempts the present strategy for the future development of the country on the basis of historical analysis made in this study.

The entire study thus covers a period of half a century, and presents a broad and critical appraisal of the economic policies followed by the Government in agricultural and industrial sectors. The achievements

and failure of these policies have been analysed and discussed. On account of the limitations of time and space, and the capabilities of a single individual, the study of other aspects of the economy has not been undertaken. In the study of industrial development, trends in output, employment, regional dispersal and impact of state policy on industrial growth have been discussed. In agricultural sector, attention has been focussed mainly on institutional changes, and their impact on the course of pattern of agricultural development. Basically, the approach has been of discussing the problems of growth in broad magnitude with emphasis on key variables. Certainly this involves inadequate attention to details of the individual cases and situations. There is no claim for tracing the developments in complete chronological order, and much of the descriptive data have been omitted. Statistical data have been relegated to the appendices for a careful and serious reader. In fine, attention has been given to the analysis of the basic problems in these sectors and the attempted solutions in the period under review.

No claim is made for a comprehensive treatment of the subject. But I have in my own way attempted to analyse the problems in a dispassionate and objective manner. Some of my conclusions are not in full agreement with the nationalist opinion of the pre-independence period where patriotic fervour got better of the historical facts. Some of my conclusions drawn in the study of post-independence period have been supported by Dutt Committee and Charles Bettelheim. The regulatory mechanism of the Government was weak and adequate operational methods for co-ordinated use of these various control devices were not properly devised. Government, therefore, failed to prevent concentration of economic power and monopolistic control and direct the development of industries according to Plan priorities. There has been no check to prevent the growth of capacity in less essential industries or industries which were already suffering from excess capacity. There has also been no concerted move in laying down sound foundations for the future development. Despite our proclaimed policy of import substitution, the final result of our industrial progress has been to increase and not to decrease the strains on our balance of payment. Official view has not yet fully realised the capacity of small-scale industries to take part in industrialisation. The possibilities of autonomous industrial expansion based on the exploitation of local resources have not been fully explored and unemployed productive resources need to be fully utilised.

It may be pertinent to point out that past events should not always be judged by current thinking and we should always try to find out whether the proposed solutions of the problems were feasible at that time. The opinions expressed in the present study are not final. It is possible

that the future historian may present the problems in a different perspective. I shall feel amply awarded if the present study arouses and stimulates the interests of the people in the subject which promises further investigations.

I am specially thankful to Hon'ble Shri Jagjivan Ramji for having accepted my request for writing the Foreward to the present study in spite of his multifarious engagements. During his long Ministerial career, he has had the experience of dealing with the various ministries and has got the necessary expertise of our socio-economic problems.

I am deeply indebted to Dr. Tulsi Ram Sharma for his able and inspiring guidance. I am grateful to Prof. A.B. Ghosh, Head of the Commerce Department, Delhi University, for his valuable suggestions from time to time. Shri P. K. Dutta and Kanahiya Lal of the Library of Ministry of Industrial Development also deserve thanks because of their prompt compliance with my demands. I shall be failing in my duty if I do not thank my friends Dr. M.K. Sethi, Dr. R. Tiwari, S.K. Inani, B.S. Khanna and K.N. Kabra for their ungrudging help and co-operation. Finally, I have not enough words to express my deep sense of gratitude to my brother Shri Keshav Deo Maheshwari who motivated me for higher education.

S. L. College,  
13th June, 1971.

B.P. MAHESHWARI



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## CHAPTER I

### INTRODUCTION

#### (Indian Economy Before the First World War)

##### Rural Economy in Pre-British India

The basic feature of the Pre-British India was a village which was economically a water-tight compartment, self-contained and independent of the outside world most of its necessities of life. Every village not only grew most of its goods but either provided from its own resources or obtained from close at hand its few simple wants".<sup>1</sup> Most of the people in villages followed agriculture as their main occupation and even artisans or village servants had agriculture as their subsidiary occupation. There was mixed population consisting of all castes and professions so as to make the communal life of villages complete by itself.

Land in those days was not scarce. Each cultivator had quite a big piece of land to support himself in reasonable comfort. Almost all the cultivators had some milch cattle and there was no shortage of milk. Every cultivator would cultivate the land at his own risk and for his own profit. There was good cooperation and villagers would supply their equipment and labour to each other during sowing and harvesting season.

Village economy was mostly a barter economy. All services were paid in the form of grains and money was not required even for the payment of taxes. Money was needed when people went to visit fairs for purchasing articles which were not locally available or for pilgrimage. Village servants and craftsmen were paid a definite quantity of grain which was fixed by custom.

Land belonged to the village community and was never regarded as the property of the king. The king would not demand more than customary taxes as there was great sanctity for traditional rights and obligation. Famine Commission 1880, has described the old system of tenures in the following words:

"It has always been accepted in principle in India that the occupant of the soil is entitled to remain there from generation to generation provided he pays the portion of the produce which

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1. Report of Industrial Commission, p. 17.



may be demanded by Government or some superior holder or landlord and this proportion was fixed by custom. Rights of this kind when once acquired were naturally conserved and strengthened by general feeling that whatever is old, ought to remain unaltered."<sup>2</sup>

The administration of village affairs was vested in the Panchayat which was a social, financial, judicial and political authority. People had full confidence in the honesty, integrity and capability of the Panchas. The village councils (Panchayats) were something like a miniature corporate state. They not only adjudicated disputes between different residents but also looked after village sanitation, roads, public utility works and other activities of common interest. The decisions of the councils were gladly accepted by the people.

The structure of rural society was little affected even by conquests as none of the major struggles had for its object the exercise of rights within the village but the exercise of rights over the village.

### British Conquest and the Systems of Land Settlement

With the death of Aurangzeb, the Moghal Empire had become weak and the various chieftains and subedars had almost become independent. There was internal strife and struggle and chieftains were quarrelling amongst themselves. East India Company took advantage of this opportunity and began to take part in the political life of the country. By the middle of the 19th Century, the British were able to subjugate the whole of India with their tactful policy of 'divide and rule' and the modern weapons of warfare.

Unlike previous rulers, British rulers did not respect the customary rules regarding land revenue and tenures. The need of increasing land revenue and strengthening the British rule were the paramount considerations in devising the land revenue policy.

After the acquisition of Diwani rights in Bengal, revenue farmers were entrusted with the task of collecting revenue for 10 years in the beginning. Later on, these revenue farmers were made landlords and permanent settlement<sup>3</sup> was concluded with them by Lord Cornwallis. The underlying motive for such a move was to attach the newly created class of landlords to the British Government because its permanence obviously

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2. Report of the Commission, p. 113.

3. Under Permanent Settlement, the landlord was required to pay 90 per cent of the rent as revenue to Government in perpetuity and 10 per cent was left with him for collection expenses. He was vested with extensive rights over the peasants and could eject peasants at his own sweetwill.

depended upon the permanence of the British rule in India.<sup>4</sup>

The introduction of Permanent Settlement was a very important event as private property in land came into being which did not exist in pre-British era and rights of peasant population were sacrificed. 'It introduced confusion into the whole system of tenures and the tendency arose for the landlord to become an absolute owner.'<sup>5</sup> The newly created Zamindars adopted various ways to enhance their income and ejected those tenants who did not abide by their wish. The Court of Directors in their letter dated 15th January, 1819 had admitted that the consequences most injurious to the rights and interest of cultivators have arisen from describing those with whom the permanent settlement was concluded as the actual proprietors of the land.<sup>6</sup>

When the English rule had become more powerful and did not need the support of an influential class the System of Permanent Settlement was abandoned in favour of Ryotwari Settlement.<sup>7</sup> This new plan was introduced by Captain Munro after it had been approved by the Directors in 1807. This new system was a complete contradistinction to the old system wherein the land revenue was permanently fixed by custom and the land was not a transferable property. This legal fiction brought into existence insecurity of possession and ownership of land—a phenomenon unknown before.

In 1822, a new plan of settlement known as Mahalwari or Village Estate System\* was adopted in North West Provinces (U.P.). Later on it was extended to Punjab with minor modifications.

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4. The motive for such a strategic move was made clear by Lord William Bentinck himself. 'If security was wanting against the extensive popular tumult or revolution, I should say that the permanent settlement, though a failure in many other respect and on its most important essential, has this great advantage; at least of having created a vast body of rich landed proprietors deeply interested in the continuance of the British dominion and having complete control over the mass of the people.' Quoted by Gopal Krishnan in his book, *Development of Economic Ideas*—Introduction.

5. Report of the Famine Commission 1880, p. 216.

6. Quoted by the Famine Commission 1880.

7. Under this system, the ryot was made proprietor of the land he tilled and land became a transferable property. The settlement was concluded for a period of 30 years and the Government reserved to itself the right to enhance the assessment for which no specific grounds were laid down by law.

8. Under this system, a group of holdings under one title is the unit of assessment as opposed to ryotwari method where each field is separately assessed. The lumpsum revenue is divided over the holdings or among the co-sharers according to their own principle of constitution. The whole body is jointly responsible for the payment of land revenue. The adjoining waste is the property of coparceners and partitioned among coparceners in relation to arable area.

When Oudh was annexed in 1856, the Government concluded directly with the village proprietors and passed over the interests of taluqdars. This led to their joining the Mutiny during which period their tenants continued to pay them rent. The proprietary rights of taluqdars were, therefore, recognised and settlement was made with them on Bengal model except that it was for a temporary period and the payments of sub-owners below them were also fixed.

The following table shows the distribution of land under the three important systems:—

	<i>Million acres</i>	<i>Percent- age</i>
Ryotwari lands	273½	46
Permanent Settlement lands	119½	20
Lands under temporary settlements	199½	34
	<hr/> 599½ <hr/>	<hr/> 100 <hr/>

### Incidence of Revenue

Revenue was permanently fixed in 1793 in permanently assessed zamindari regions. At that time it was considered oppressively high. In temporarily assessed zamindari regions of U.P., Government demanded 83 per cent of the rent as revenue. Similarly first assessments in ryotwari lands in Madras were fixed at half of the estimated produce and were considered very severe. Later on the basis of assessment was reduced in all the regions but the revenue demand in fact remained quite substantial. At the time of revision, rents were increased in Madras and Bombay. Civil War of America temporarily increased the prices of cotton. This rise in price was taken as permanent and revenue rates were substantially increased. Worst of all, these abnormal increases were made immediately effective. As a result, agrarian disturbances followed in some parts of Bombay in 1875 which were symptomatic of the difficulties faced by ryots in all ryotwari areas.

The various modes of settlements tried by the Government have been given to show the attempts made by the Government to accomplish its dual need, i.e., prosperous agriculture and increasingly regular flow of revenue. Government became successful in increasing its revenue but it did not represent a part of increasing prosperity of the tiller of the soil. On the other hand, the economic condition of the actual tiller of the soil deteriorated and he had hardly any surplus left with him to effect improvement in the land. He had also no incentive for doing so. In Zamindari areas, the Zamindar did nothing to effect improvement and the peasant did not improve for the fear of ejection as he did not possess the security of the tenure. Zamindar rack-rented the tiller mercilessly and

the tenant could not adopt alternative occupations because of the decay of indigenous industries. There was no respect for the tradition of taking customary rent from the cultivator. Civil Courts helped him in enforcing his rights. In ryotwari areas conditions were no better, the Government forced by economic circumstances itself raised the rents and did little to improve the cultivation.

There was great rigidity in the collection of revenue and even in famine years, the Government did not show any mercy. Naturally the ryot was forced to borrow from the moneylender. Mr. Thornburn's inquiry<sup>9</sup> into the conditions of Punjab peasants clearly indicated that the main causes of indebtedness were reduction in the size of holdings and the obligation to pay land revenue every year. The right of property and transferability of land did him no good and the land gradually began to pass from the cultivator to the moneylender. In short, it may be said that the land revenue policy followed by the British Government did not improve the lot of the tiller of the soil by making agriculture prosperous.

### Decay of Indigenous Industries

The introduction of British rule and development in the means of transport and communications led to the decay of indigenous industries. At one time Indian handicrafts not only supplied the requirements of court gentry and urban elites<sup>10</sup> but were also in great demand in foreign countries and had earned world-wide reputation.<sup>11</sup>

Britishers had built their industry by imposing protection tariffs<sup>12</sup> on foreign goods. The exploitation of India provided the necessary capital<sup>13</sup> for industrial revolution to transform her industry by the use of machinery and power.<sup>14</sup>

9. Quoted by Digby, in his book, *Prosperous British India*.

10. D.R. Gadgil, *Industrial Evolution of India*—Chapter on Urban Handicrafts contains very nice discussion on this aspect.

11. Industrial Commission testified the reputation in the following words: 'At a time when the West of Europe, the birth-place of the modern industrial system, was inhabited by uncivilised tribes, India was famous for the wealth of her rulers and for the high artistic skill of her craftsmen'—p. 1 of the Report.

12. According to Horace Wilson, 'Had no such prohibitory duties and decrees existed, the mills of Paisley and Manchester would have been stopped at their onset and could scarcely have been set in motion by the power of steam'. Quoted by M.M. Malaviya in his Minute of Dissent in the report of Industrial Commission.

13. It was estimated by Digby that between Plassey and Waterloo £500 to £1,000 million were transferred to England, p. 89 of *Prosperous British India*.

14. "Had Watt lived 50 years earlier, he and his invention must have  
(Contd. on next page)

Once England had established its dominant position; it discouraged all attempts in colonies to manufacture such items as could be provided for them in the mother country. Not only that, they adduced arguments to show that India was fit only to be an agricultural country.<sup>15</sup> The skill of her people and climate did not favour the growth of manufactures.

The development of railways, the reduction in sea freights and abolition of transit duties brought complete ruin to Indian industries. The machine-made goods could now easily reach even in villages and ousted the local products because of their cheapness. The disappearance of native courts and nobles and changes in the tastes of new elite-class further contributed to the decay of handicrafts.

As a result of the decay of these industries, artisans and skilled workers were worst affected. Rich artisans became cultivators but most of them lost their status and became landless labourers and were the first victims of famines. British Government forced the pace of the change and did not take suitable measures to mitigate the effects of this change. In independent countries, the process of the change was gradual and adequate measures were taken to remove the hardships of the affected people in this process of transformation.

### Commercialisation of Agriculture

Remarkable developments in the means of communications and the opening of Suez Canal in 1869 introduced fundamental and far-reaching changes and transformed old Indian economy based on self-sufficing villages to a new one based on competition and price mechanism.<sup>16</sup> Villages were jerked out of self-sufficiency and agriculture began to produce for the world markets especially for European markets where Industrial Revolution created new demand for raw materials and food-stuffs.<sup>17</sup> Increased export demand led to specialisation in the cultivation of particular crops in particular areas. The favourable climate of Bengal tempted the ryots to

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perished altogether—Plassey was fought in 1757 and probably nothing has ever equalled the rapidity of the changes which followed". Brooks Adams quoted by Malaviya in his Minute of Dissent in the report of Industrial Commission.

15. East India Company in its letter to Bengal dated 17th March, 1769 stated that manufacture of raw silk should be encouraged in Bengal and that the manufacture of silk should be discouraged. Prosperous shipping industry was suppressed by prohibiting Indo-British trade in Indian ships.

16. B.M. Bhatia, *Famines in India*, Chapter on Commercial Revolution contains a detailed study.

17. Knowles, *op. cit.*, p. 17.

extend their jute cultivation and the cotton cultivation was developed in Central Provinces, Bombay, U.P., Punjab and Sind. As a result of specialisation, the cultivators in certain provinces did not care to grow even their food requirements and purchased the same from the market. Farmer was relieved from the depressing effect of a purely local market.

As a result of the increasing foreign demand, the prices of agricultural commodities showed a steadily rising trend which was more pronounced after 1905. The prices of export crops like jute, cotton and oilseeds showed greater increase in relation to the prices of wheat, jowar and bajra which were meant for home consumption. Famine Commission 1901 therefore came to the conclusion 'that of late years, owing to high prices there has been considerable increase in the incomes of land holding and cultivating classes and that their standard of comfort and of expenditure has also risen.'<sup>18</sup> The subsistence farmer, however, failed to reap any benefit from the rise in prices as he did not have much surplus produce to sell. On the other hand the condition of landless labourers deteriorated as the rise in prices was not reflected in wages.

We can now briefly summarise the policies followed by the British Government and their consequent effect on the Indian economy in the following words:—

1. New revenue system adopted in Zamindari areas created a class of intermediaries who were made landlords by suppressing the traditional rights of peasants. This class rack-rented the tenants and left hardly any surplus with the peasants.

2. In Ryotwari areas, the settlement was made directly with ryots but incidence of revenue was so heavy that the cultivators had no surplus left with them.

3. The new concept of property made the land transferable and on account of the growing indebtedness and the introduction of new judiciary system, the land began to pass from cultivating class to non-cultivating class. There was thus great insecurity of tenures.

4. Incidence of taxation on agriculture was heavy and led to the impoverishment of rural masses. Jute and tea industries, etc., earning bumper profits were not made to pay taxes commensurate with their capacity. During the Company rule, land taxation was kept high for earning the highest profit to shareholders. Even during Crown rule, though the basis became liberal but the total amount of land taxation remained high to meet the deficit of railways and wars.

5. Opening of the country by railways did increase the prices of agricultural produce and had benefited the substantial owners but the decay of indigenous industries increased the pressure of land and swelled the number

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18. *Vide* p. 363 of the Report.

of landless labourers. On the whole, poverty increased in rural areas, as the Government failed to encourage alternative occupation for absorbing landless labourers and did not adopt suitable policies for the growth of industries.

### Famines

The above analysis clearly shows that the policies followed by the British Government did not bring prosperity to large masses of people and had benefited only a few privileged classes like landlords and moneylenders. Majority of rural people who were subsistence farmers or landless labourers did not have the capacity to resist the shock of famine on account of their impoverishment. As a result, the famines took heavy toll of human lives which would be clear from the following table:<sup>19</sup>

#### *Famine Mortality in 19th Century*

First 25 years	Perhaps 1 million
Second 25 years	Perhaps 5 lakhs.
Third 25 years	Recorded 5 million.
Last 25 years	Estimated 26 million.

Vicissitudes of the monsoon cannot alone account for such a high mortality during the last quarter of the 19th century. This high mortality bears an ample testimony to the wrong policies followed by the British rule. In all the wars that were fought in the world between 1793 to 1900, the mortality amounted to 5 million while famines in India between 1891 to 1900 alone took a toll of 19 million lives.

As regards the causes of the poverty of the masses, Famine Commission 1880 admitted that at the roots of much of the poverty of the people of India and of the risks to which they are exposed in seasons of scarcity lies the unfortunate circumstance that agriculture almost forms the sole occupation of the mass of people<sup>20</sup> and suggested the introduction of a diversity of occupations through which the surplus population may be drawn.<sup>21</sup> However, the policies followed by the Government did not bring any material change in the conditions and Famine Commission 1901 had to admit 'that the largest section constituting labourers and least skilled of artisans have not shown any larger command of resources or any increased power of resistance.'<sup>22</sup>

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19. Digby., *op cit.*, p. 131. All the figures of mortality have been taken from his book.

20. P. 175 of the Report.

21. *Ibid.*, pp. 113 to 117 contain very nice discussion on the need for the diversification of occupational structure.

22. P. 363 of the Report.

### Corrective Measures

Recommendations of the various Famine Commissions as also the growing national consciousness and awakening put pressure on the Government to modify its policy. Moreover, by the turn of the century, railways had begun to pay and Government could, therefore, devote more funds for the development of the economy. Not only the methods of combating the famines were improved but a series of measures were also undertaken to improve the economic conditions of the people so as to prevent the recurrence of famines. We shall now critically examine the various measures adopted by the Government in this connection.

### Direct Measures

The following measures were devised for combating the famines.

#### Famine Insurance Fund

After 1877-78 famine, Government created a fund known as Famine Relief and Insurance Fund by making an annual grant of Rs. 1½ crores which was to be obtained by imposing a cess on land revenues.<sup>23</sup> To the extent to which the amount was not spent on relief, it was to be solely spent on reduction of debt or rather upon the avoidance of debt.<sup>24</sup> The full amount of this grant was not utilised for direct expenditure on famines and was used to meet the loss of railways.<sup>25</sup> As a result, stringent measures were taken to keep the amount of expenditure on famine relief to the minimum.

#### Famine Codes

On the recommendations of the Famine Commission 1880, the Government promulgated provisional codes in 1883. In course of time separate codes were prepared and sanctioned for different provinces.<sup>26</sup> These codes prescribed 'efficient channels of information by which the approach of scarcity or famine may be detected in good time and to provide for a state of preparedness in respect of measures of relief when the

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23. Mr. H.E. Sullivan in his Minute of Dissent appended to the report of Famine Commission 1880 strongly objected to the levy of cess on the ground that land taxation was already high and therefore urged the taxation of urban income to create this fund.

24. Report of Famine Commission 1880, p. 324.

25. *Economic History of India* by R.C. Dutta, pp: 592-94.

26. These provincial codes were 'compiled on a uniform system and based upon definite instructions issued from time to time by Government of India...and such differences as exist are mainly in the matter of details'. —*vide* Report of the 1898 Famine Commission, p. 45.



emergency arises. All able-bodied persons were provided with work on subsistence wage,<sup>27</sup> and gratuitous relief provided to persons who could not work on the relief works and who could not depend on any other relative for support.

There was great stinginess in relief expenditure. Government provided a wage that was absolutely minimum to keep people alive. The number of people attracted to relief works was taken as an index of liberality or otherwise of the wage scale; so that, if large numbers came to relief works the wage was further cut to drive away a part of the workers.<sup>28</sup> Besides, the Government also did not reap adequate benefit out of the work done on relief works as they were not properly conceived beforehand.

### Railways

Government took keen interest in accelerating the pace of railway construction and by the end of the 19th century 25,000 miles of railway lines were completed involving a total outlay of £226 million. Railways not only reduced the cost of inland transport but also effected considerable savings of time and money in the carriage of goods from one part of the country to another.<sup>29</sup> In fact, mortality was severely reduced in case of local scarcities. Variations in foodgrains prices in different parts of the country were greatly reduced.

Owing to the prevalence of *laissez faire* policy, Government, however, did nothing to regulate the internal prices of foodgrains. As a result of the development of means of transport, the prices were raised even in non-famine areas causing great suffering to the people. Further, on account of rise in the prices, relief measures were rendered both more expensive and less effective because the number of persons seeking relief increased. Government even did not ban the export of foodgrains during famines on the ground that if the country lost its market during this period it would be difficult to recapture them again. It was concerned more with the balance of payment position than with the millions of human lives which collapsed during famines. Even in England and France, the export of foodgrains was banned in famines.

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27. Report of the Famine Commission 1898, p. 45.

28. B.M. Bhatia, *Famines in India*, p. 417.

29. The effect of railways in combating the famines has been described on pp. 169 and 170 of the report of Famine Commission 1880. Railways proved very helpful in distributing the available supplies.

## MEASURES ADOPTED FOR THE PREVENTION OF FAMINES (INDIRECT MEASURES TO IMPROVE THE CONDITION OF THE CULTIVATORS)

### Irrigation

The irrigation policy of the Government in 19th century was determined purely from the point of view of adequate return on investment and in fact in 1896-97 Government could earn a profit of Rs. 81 lakhs after paying 4 per cent interest for the amount utilised on irrigation. Greater attention was paid to the construction of railways and the progress in this direction was very slow till the close of 19th century. Famine Commission 1901, therefore, bitterly criticised the Government for this step-motherly treatment in relation to railways and urged the Government to take more active steps for extending irrigation facilities.<sup>30</sup> The Commission came to the conclusion that 'under the existing circumstances greater protection will be afforded by extension of irrigation works which would not be otherwise undertaken'<sup>31</sup> and urged the Government to undertake protective irrigation works without the expectation of any direct return. As a result of the recommendations of 1901 Commission, the Government appointed an Irrigation Commission in 1901 which submitted its report in 1903. The Commission found great scope for the extension of irrigation works and laid a special emphasis on the extension of minor irrigation works through state advances. A 20-year Irrigation Plan involving a total expenditure of Rs. 44 crores was drawn up. The Government agreed to provide the requisite funds recommended by the Commission and irrigation facilities were developed at an accelerated speed. At the end of 1896-97 a sum of Rs. 31 crores was spent on irrigation<sup>32</sup> and by 1911 a sum of Rs. 42 crores was spent.<sup>33</sup> Triple Canal Project involving a capital of Rs. 10 crores was also completed in 1915.

### Revenue Policy

The Government now increasingly realised the importance of its revenue policies in effecting improvement in the economic conditions of the rural masses and, therefore, announced revised Land Revenue Policy in 1902 which recognised 'that assessments should be equitable in character and moderate in incidence; and there should be left to the proprietor or cultivator of the soil—as the case may be—that margin of profits that will enable

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30. Report of the Famine Commission 1901, pp. 330-34, containing very good discussion.

31. Report of the Famine Commission 1901, p. 30.

32. Report of Famine Commission 1901, p. 332.

33. This figure has been taken from the Report of 1911 Census.

him to save in ordinary seasons to meet the strain of exceptional misfortunes'.<sup>34</sup> The enhancement of revenue in future was to be made only on the ground of increase in price and it was assured that enhancement in the assessment would be introduced gradually. The Government also promised to suspend or remit the land revenue in famine years.

To provide relief to the tenants, Bengal Tenancy Act was passed in 1859 which conferred occupancy rights on tenants who occupied the land for 12 years. The Act was amended several times and by 1911 over 80 per cent of the tenants had become settled ryots.<sup>35</sup> Similar Acts were passed in several other provinces which conferred occupancy rights on certain class of tenants and the powers of the landlords for enhancing the rent were also restricted and in several cases the right of enhancing rent was entrusted to the court or the settlement officer and rent could be enhanced on specified grounds only.

The protection was not afforded to all classes of tenants under the Tenancy Acts. The relations between the landlord and the tenants were also strained because of their conflicting interest<sup>36</sup> and caused litigation where often the landlord won because of his better economic position. Nevertheless these Acts afforded valuable relief to the tenants.

### Protection of Debtors and Provision of Rural Credit

Famine Commissions 1880<sup>37</sup> and 1901<sup>38</sup> had indicated in their reports that rural masses were deeply involved in debt and land was gradually passing to the moneylenders. Rural indebtedness had become inflammatory and led to riots in Deccan. What happened in Deccan was symptomatic of what might be expected elsewhere. Action was, therefore, taken in some provinces to regulate the relations between moneylenders and cultivators.

34. *Vide* para 4 of Government Resolution No. 1-50-2 of 1902—quoted by Bhatia in his book on *Famines in India*.

35. Knowles, *op. cit.*, p. 413.

36. Famine Commission 1880 has very nicely discussed the growing conflict of interest on p. 130 of the Report. As a result of the growing conflicts landlord refused all aid to his occupancy ryot and did all he could do to ruin him.

37. Famine Commission 1880 came to the conclusion that about 1/3rd of the land holding classes are deeply and inextricably in debt and that at least equal proportion are in debt though not beyond the power of recovering themselves. Peasantry of Bombay and Madras were more deeply involved in debt. For details, consult p. 130 of the Report.

38. Famine Commission 1901 was of the opinion that at least 1/4th of the cultivators in the Bombay Presidency have lost possession of their land; that less than 1/5th are free from debt and the remainder are indebted to a greater or lesser extent. For details, consult p. 108 of the Report.

Besides, Government also adopted 2 measures for providing direct financial assistance. Under Land Improvement Act of 1883, advances could be made to the cultivators for effecting permanent improvements in the land under their possession on moderate rate of interest and the principal was repayable in 30 years. Agriculturists Loans Act 1884 provided assistance for purchasing seed, cattle, etc., during the period of distress. During 1899 famine, a sum of Rs. 1.80 crores was provided under these Acts and a sum of Rs. 2½ crores was outstanding on 31st March, 1904. Famine Commission 1901 complained of the untimely distribution of the assistance on account of which it was not fully effective.<sup>39</sup> On the recommendation of 1901 Commission and Irrigation Commission 1903, the terms of the loans were further liberalised. However the amount set apart by the provincial governments was not increased and even this allocated amount could not be fully utilised on account of the inefficiency of official machinery.

### Co-operative Societies

Meanwhile public opinion was growing on the need of providing alternative service of credit in place of moneylender. M/s. F.A. Nicholson in Madras and Dupernex in U.P. studied the possibility of establishing agricultural banks in India. Famine Commission 1901 also recommended for the establishment of Mutual Credit Associations for the benefit of agriculturists. Co-operative Societies Act was passed in 1904 and was amended in 1912 to remove the difficulties which were experienced in the working of 1904 Act. The progress of the Co-operative Societies can be judged from the following table:—<sup>40</sup>

<i>Year</i>	<i>No. of Societies</i>	<i>No. of Members</i>	<i>Capital Rs.</i>
1907	1,357	1,49,160	44,14,086
1914	14,881	6,95,998	7,45,31,725

The Co-operative Societies, no doubt, made good progress but were unable to supply more than a small fraction of the credit requirements.<sup>41</sup> There were no methods to channelise urban money into villages and Government did not extend financial assistance to the societies.

Government appointed a Committee on 8th October, 1914 under the chairmanship of E.D. MacLagan to find out whether the movement was

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39. P. 188 of the Report.

40. Based on the Statistics given in the report of the Committee of Cooperation 1915 (popularly known as MacLagan Committee Report).

41. Rural credit supplied by moneylenders was estimated at Rs. 500 crores at that time.

proceeding on lines economically and financially sound and whether Government should further foster the growth of the movement.

### Agricultural Improvement

Before the recommendations of Famine Commission 1880, attempts were made to introduce the cultivation of improved cotton and some other commercial crops like tea, coffee, etc. On the recommendations of Famine Commission 1880, agricultural departments were established in the provinces. But these departments were concerned more with the collection of accurate information rather than with the agricultural improvement. Famine Commission 1901 pointed out the inadequate progress made by these departments and recommended for the 'steady application to agricultural problems of expert research'.<sup>42</sup> On the recommendations of the Commission, agricultural departments were reorganised in all provinces. Qualified Directors were appointed and in 1912, 40 scientific posts were created. With the donation of £30,000 from Henry Phipps of U.S.A., Lord Curzon established a fully equipped Research Institute at Pusa. Attempts were made to evolve better strains of rice, wheat, etc. The attempts of the agricultural departments, however, did not have any significant impact on the productivity of agriculture.

Another factor that reduced the poverty of landless labour was the marked rise in the wages of labour. Since the beginning of 20th century, the rise in the wages was more than the rise in the prices of foodgrains. The developing industries of Bengal and Bombay required more labour and the extension of irrigation facilities also led to greater demand of labour in Punjab and Sind. Besides, the labour was also migrating to foreign countries like Ceylon, Malaya, Natal, British Guiana, Fiji, etc. The migration of labour to foreign countries and other industrial centres helped to raise the level of wages in the countryside.

In conclusion, it may be said that as a result of liberal Government policy and certain other favourable developments, famine had become a thing of the past. U.P. Famine of 1908 did not result in heavy mortality despite the severity of the famine. The problem of poverty could however be solved by developing fully the country's resources and drastic land reforms.

### Introduction of Capitalistic Agriculture in India

The development of inter-oceanic route and the arrival of the white-men in the tropical regions of the world resulted in the development of a new economic phenomenon called plantation industry.<sup>43</sup> Plantation industry had two important aspects. One of the aspects was that the planta-

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42. P. 112 of the Report.

43. Sharma and Chauhan, *Indian Industries*, p. 8.

tions were organised on scientific lines and the second feature was that they were partly agricultural and partly industrial. In this way they represented a half-way house between agriculture and industry.

The Indian plantations differed however from the plantations organised in the other parts of the world. Production of indigo was not undertaken by the planters in India on their own account. It was produced by the agriculturists themselves and was supplied to the factory at rates settled in advance but the tea and coffee plantations were organised with the help of Indian labour. Indigo disappeared almost completely on account of the competition of synthetic dyes from Germany. Coffee could not also attain a good size and it was really the tea industry which acquired an important position and India became the biggest exporter of the tea in the world.

## Tea

Pioneering attempts to demonstrate the feasibility of tea cultivation in Assam were made by the Company (East India Company) and the first samples of tea sent to England in 1838 met with favourable response. After the experiments had proved successful the Government severed its direct connection with the industry in 1865.

Rash attempts made by English promoters to extend tea cultivation in India led to the depression in 1866. The elements of weakness were eliminated in that depression and since then the progress was rapid. In 1888, Indian tea exports into England surpassed Chinese exports. The main problem of the industry had been that the production exceeded the growth in demand and therefore efforts were made to propagate the use of tea. Funds for this purpose were obtained by imposing a cess on tea under the Tea Cess Act of 1903. By 1907 new markets were developed on the Continent and China Tea was uprooted from American, Russian and Australian markets. The progress of tea industry can be judged from the following table of export."

### EXPORT OF TEA

<i>Year</i>	<i>Total Exports</i>		<i>Exports to England</i>	
	<i>Quantity in million lbs.</i>	<i>Value in million £</i>	<i>Quantity in million lbs.</i>	<i>Value in million £</i>
1890-91	107.	3.4	100.2	3.2
1895-96	137.7	5.1	123.9	4.6
1900-01	190.3	6.3	166.1	4.7
1905-06	214.2	5.8	166.9	4.5
1910-11	254.3	8.2	182.9	5.9
1913-14	289.4	9.9	209	7.2

It would be seen from the above table that the United Kingdom was the biggest importer of tea but she was not consuming the entire imported quantity and was acting as a supplier of tea to other countries because of her excellent trade connections with other countries. Tea plantations were confined to Assam, Darjeeling and Jalpaiguri districts in Bengal, the elevated regions of Malabar coast and Himalayan slopes in U.P. and Punjab. Attempts were also made to increase the production of tea per acre and between 1885 and 1916 the production increased from 291 lbs. to 566 lbs. per acre.<sup>45</sup> The only sore point in the development of the industry was the inhuman treatment meted out to the labour which worked on these plantations. Despite legislative attempts to improve the labour conditions, not much success was achieved in this direction. Nevertheless, the industry led to the colonisation of Assam and became one of the biggest foreign exchange earners. The industry gave employment to more than 6 lakh workers and had a capital investment of more than £10 million.

### Growth of Large-scale Industries

After the plantations, the second step in the industrialisation was the beginning of consumer goods industries. The industries were mainly started under private initiative and the Government had almost no industrial policy to encourage the growth of industries. There was considerable time lag between the decay of urban handicrafts and the introduction of modern large-scale industries. Apart from the indifferent attitude of the Government, the 'economic organisation was also not favourable for an easy transformation of industries from handicrafts to factory stage'.<sup>46</sup> The means of communications and power potential were not developed and the absence of engineering and machine tools industries hindered the growth of large-scale industries. There was ignorance of the modern methods of organisation and technology which are the base of modern industries. Above all there were constant wars and the country was settled only when the administration passed to the Crown.

The conditions improved gradually and a modest beginning was made after 1850. First cotton mill was started at Bombay in 1851 and this was followed in 1855 by the establishment of a jute mill by George Auckland in Bengal. The construction of East India Railway through the coal region of Bengal led to the development of coal industry and further facilitated the growth of large-scale industries. The depression of seventies in England encouraged the flow of British capital and stimulated the development of railways and industries in the country.

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45. *Ibid.*, p. 24.

46. T.R. Sharma: *Location of Industries*, p. 14.

The direction of industrial development was pre-determined by the existence of large export and import trade.<sup>47</sup> Transportation system was developed to facilitate export-import trade with imported equipment. Cotton, jute, and plantation industries were started for exporting their products besides other mechanical facilities (like cotton ginning, jute bailing presses, etc.) meant for processing the agricultural produce were also brought into existence. Coal was needed for the running of transport and other industries. The obvious need of having repairs done on the spot led to the establishment of railway workshops and numerous engineering shops without any corresponding equipment for actual manufacture. Besides, there were some paper mills, woollen mills and a few tanneries producing half-tanned leather for export. Bengal Iron Company was producing small quantity of pig iron and Tata Iron and Steel Company had started working in 1912.

Industries were developed around the port towns of Calcutta, Bombay and Madras and a few other tracts in the country. Calcutta and the adjoining areas had jute mills, engineering workshops, flour mills, paper mills. Raniganj and Jharia had most of the coalfields. Bombay had cotton textile industry, engineering workshops, silk mills, flour mills and tanneries. Plantations were found mostly in Assam and two contiguous districts of Bengal. Delhi had a few cotton mills, flour mills and oil mills but it was an important distributing centre of manufactured goods in Northern India. Kanpur had cotton mills, woollen mills, leather factories, sugar mills and a number of cotton gins and presses. Other important centres of industry were Ahmedabad, Madras, Madura, Nagpur and Kolar.

Most of the organised industries including jute mills, coalfields, plantations and transport companies were financed and managed by Europeans specially British managing agents. Bengali merchant did not pass on from trading to manufacturing like his Bombay compeer. In Bombay, cotton mills and other concerns were financed and managed by Parsees, Bhotias and Khoja merchants. Europeans did not dominate in the industrial field in Bombay. But even in case of cotton mills owned by Indians most of the managers and technical personnel were Europeans.<sup>48</sup>

Metallurgical and chemical industries were not established and no serious efforts were made to develop fully the industrial potentialities of the country. The country was dependent for most of its manufactured goods including consumer goods on imports. Our imports from England during this period exceeded the combined imports of Canada, Australia and the Union of South Africa.<sup>49</sup> 'The blanks in our industrial Catalogue',

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47. *Report of the Industrial Commission*, p. 51.

48. In Bombay, Indians owned 110 mills while 25 mills were owned jointly but there were 45 Indian managers, Census of India 1911.

49. *Ibid.*, p. 49.



remarked the Industrial Commission, 'are of a kind most surprising to one familiar with European countries.'<sup>50</sup> India could not manufacture machinery, machine tools, agricultural implements, sheet and optical glass, electrical equipment, newsprint, dyes, drugs. So great was the dependence on imports that in the event of war even the existing industries could not maintain production because of the difficulty of importing equipment and stores. The ease with which imported supplies could be obtained did not cause anxiety either on the part of industrialists or Government to initiate the industries whose products were essential both in times of peace and war.

Apart from the fact, the industrial system was unevenly developed, industrial growth was very slow in comparison to the requirements of the country. Only a small proportion of the population was absorbed in the large-scale industries. According to 1911 Census, about 1.3 million people were engaged in industries and mines employing more than 20 workmen. Besides 8 lakh workers were employed on plantations. Famine Commission 1880, pointed attention towards the inadequate development of industries for drawing the surplus population from agricultural pursuits.<sup>51</sup> Subsequent Famine Commissions also expressed their concern towards this phenomenon. The poverty of the masses and the heavy mortality suffered in the famines aroused national consciousness.

Despite the recommendations of the Famine Commissions and public agitation, Government attitude remained unaltered. Government stuck to its *laissez faire* policy and did not foster the development of industries in the country. Probably, the Government did not have the strength to withstand the opposition of vested British capitalists. The cotton textile duties proved it beyond doubt that Government had at its heart the good of British industries rather than of indigenous industries. Government attitude did not meet the aspiration of the Indian public.

Now we shall review the growth of some large-scale industries.

### Cotton Industry

The industry owes its origin to the Parsi merchants of Bombay who had made fortune in the opium trade with China and later on, in the cotton boom which American Civil War brought to the country. First cotton mill was started in 1851 and within a short period of time more mills were started in Bombay.

In the beginning the industry was localised at Bombay because the industry primarily exported yarn to China and other countries of Far East. The industry imported its coal, machinery, skilled labour and stores from

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50. *Ibid.*

51. *Vide* Report of the Commission, p. 175.

foreign countries. The port of Bombay facilitated the imports of its requirements from England and the exports of finished product to foreign countries. Besides, the humidity of climate and availability of cotton also favoured the growth of the industry at Bombay.

American Civil War increased the prices of cotton and adversely affected the progress of the industry for the time being. By 1870 the financial stability of the industry was secured and rapid progress was made up to 1895. The progress of the industry was greatly affected by the acute financial depression, plague and famines between 1895 and 1905 and several mills were liquidated while others changed the managing agency. After 1905 the progress of the industry was greatly stimulated by the Swadeshi Movement but the export earnings declined because of stiff Japanese competition in the China market. As a result, the industry began to rely more and more on the home market and devoted greater attention to the weaving section. The following table shows the progress of the industry:—

**Progress of the Industry on the Eve of the World War I**

<i>Year</i>	<i>No. of mills</i>	<i>Number of</i>		
		<i>Persons employed</i>	<i>Looms</i>	<i>Spindles</i>
1879	58	39,537	13,307	14,70,830
1888-89	109	92,126	22,156	26,70,022
1898-99	174	1,56,132	37,288	44,63,342
1908-09	233	2,36,827	74,592	59,66,530
1913-14	264	2,60,847	96,688	66,20,576

The industry was in a position to produce the entire requirements of the yarn up to 25s.; while the requirements of the country in respect of yarn between 26s. and 40s. could be satisfied to a substantial extent and the imports amounted to less than a third of our requirements. The country had still to import superior quality yarn from foreign countries. As regards the production of cloth, the country was producing mostly dhoties, shirting and colour fabrics and depended on foreign imports for fine quality cloth. Of the total Indian requirements, the mill section of the industry could meet 23 per cent and handloom section 18 per cent requirements while 59 per cent of our requirements were met from imports.

### **Jute Industry**

Jute industry in India was pioneered and developed by English firms which were engaged in foreign trade. The first Jute Mill in India was started in 1855 at Rishra (Bengal) on the land which was once owned

## INTRODUCTION

by Warren Hastings.<sup>52</sup> Unlike cotton mills, the early jute mills in India were started to meet the local requirements. The production was so profitable that by 1875 the number of mills increased to 16. Later on Calcutta jute mills were able to secure market in foreign countries in competition with the Dundee (Scotland) mills. Since then industry began to rely more and more on foreign demand and a major portion of the production was meant for foreign market. On the eve of I World War, India had become the foremost producer of jute goods in the world by outbidding Dundee and the exports of jute manufactures amounted to £18.8 million. The progress of the industry can be seen from the following table:—<sup>53</sup>

<i>Year</i>	<i>No. of mills</i>	<i>No. of persons employed</i>	<i>000 omitted looms</i>	<i>Spindles</i>
1879-80 to 1883-84	21	38.8	5.5	88
1884-85 to 1889-90	24	52.7	7	138.4
1890-91 to 1893-94	26	64.3	8.3	172.6
1894-95 to 1898-99	31	86.7	11.7	244.8
1899-1900 to 1903-04	36	114.2	16.2	334.6
1904-05 to 1908-1909	46	165	24.8	510.5
1913-1914	64	216.3	36	744.3

A remarkable feature of the industry was its concentration in a small strip of land on the Hooghly river around Calcutta. The raw jute was imported from Northern and Eastern Bengal and Assam; coal was available from the Bengal coalfields. Port of Calcutta offered excellent facilities for the importation of its requirements and export of finished products. In the matter of machinery, technical knowledge and skilled labour, the industry was dependent on Dundee.<sup>54</sup>

### Coal Industry

The first regular working of coal mining began in 1820 but the opening of the first section of East India Railway through Raniganj in 1855 really stimulated the coal production. Jute and other industries had also come into existence by this time which further accelerated the progress of the industry. Since then the progress of the industry has been rapid and substantial. The progress of the industry would be apparent from the following table:—

52. D.R. Wallace: *Romance of Jute*, Introduction.

53. *Hand Book of Commercial Information* by Cotton, p. 108.

54. Sharma, *op. cit.*, pp. 89-91. Causes of the location of Jute Industry in Bengal are discussed on pp. 89-91.

**Average Quinquennial Production of Coal in India**

<i>Year</i>	<i>Quantity (million tons)</i>
1901 to 1905	7.6
1906 to 1910	11.5
1911 to 1915	15.4

More than 80 per cent of the coal production came from Raniganj and Jharia coalfields which was also superior in quality. Outside this area, the coal was also mined at Singreni (Hyderabad), Wardha, Panch Valley (Central Provinces), Umaria (Rewa State) and Jhelum (Punjab).

**Foreign Trade**

The study of foreign trade also points out the transformation of Indian economy on colonial pattern. As Myrdal has rightly pointed out that the effect of international trade was to promote the production of primary products and the extinction of small-scale industry and handicrafts.<sup>55</sup>

Up to 17th century, India exported cotton fabrics, spices, precious stones and other products of urban handicrafts and in exchange received corals, lead, copper as well as precious metals. Even up to the first half of the 18th century export of metals from England was of the order of £27 million as against the value of goods amounting to £9 million. Tides turned against the country when the East India Company acquired control of Bengal revenues. Through political subjugation, tariffs and introduction of machinery into manufacturing process India began to import those very goods which had hitherto bulked so largely in her foreign trade, viz., cotton manufactures and sugar.

A study of the composition of our foreign trade brings out the fact that our exports consisted of raw cotton, foodgrains, oilseeds, raw jute, opium, hides and skins, tea and cotton and jute manufactures. Major part of the exports consisted of foodgrains, raw materials and plantations produce. Most of these commodities had inelastic demand in the export markets and had suffered from excessive price fluctuations and the technological improvement in their export production tended to transfer the advantages to the importing countries. On the other hand, we imported cotton manufactures, machinery, railway rolling stock, sugar, mineral oil

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55. "The main positive effect of international trade on the under-developed countries has in fact been to promote the production of primary goods; and such production employing mostly unskilled labour." *Economic Theory and Underdeveloped Regions* by Gunnar Myrdal, p. 52.

and hardware. About 2/3rds of the imports in the pre-war period consisted of manufactured goods. Imports of cotton manufactures constituted 1/3rd of the total imports and during the middle of the 19th century they amounted to half of our total imports.

About 63 per cent of our imports (average of 5 pre-war years) came from England which took only 1/4th of our exports. Germany, Japan, U.S.A., Italy, Belgium were important customers of our exports. It is thus clear that England was interested mostly in pushing her manufactures into this country and not in our exports. Moreover, most of our exports to England were meant for resale to other countries. Except with England and Java, we had favourable balance of trade with other countries.

There was a steady growth in our foreign trade. Both exports and imports increased as can be judged from the following table:—

Year	Average Trade of India in Quinquennial Periods <sup>56</sup>		
	Import in million £	Exports in million £	Excess of Exports
1854-55 to 1858-59	17.9	17.25	— .7
1874-75 to 1878-79	32.1	38.5	+ 6.4
1884-85 to 1888-89	50.1	60.1	+ 10
1899-1900 to 1903-04	73.8	91	+ 17.2
1909-1910 to 1913-14	132.6	155	+ 22.4

The table above shows that there was a favourable balance of trade which was partly utilised for meeting Home charges and partly for importing precious metals (Gold and Silver).

The growing volume of foreign trade was cited as an evidence of growing prosperity by the Colonial Power. But such a conclusion was not warranted by the facts of the situation. The trade tended to have backwash effects and strengthened the forces maintaining stagnation or regression and did not have expansionary effects on the economy. Myrdal has very rightly pointed out that a widening of markets often strengthens in the first instance the rich and progressive countries whose manufacturing industries have the lead and are already fortified by the surrounding external economies while the underdeveloped countries are in continuous danger of seeing even what they have of industry and in particular, small-scale industry and handicrafts priced out by the cheap imports from the industrial countries.<sup>57</sup>

56. *Hand Book of Commercial Information*, p. 87 (1 Edition).

57. Myrdal. *op. cit.*, p. 51.

## CONCLUSION

*(Transformation of Indian Economy by the Colonial Government)*

The introduction of British rule led to the disruption of the old economic organisation. In order to establish their power, British introduced permanent settlement in Bengal and vested the newly created Zamindars with enormous power over the peasants who fleeced the tenants mercilessly. Even when this system was abandoned in favour of ryotwari system, the land taxation was kept very high by the Government resulting in the impoverishment of the masses. Newly introduced ideas of 'property in land' and the 'contract system' also did not work well in the agricultural sector of the economy.

The domination of industrialists in the political arena of England led to the reorientation of the policy of British Government in favour of 'Home Manufacturers'. They wanted Government to take such measures as would encourage the export of British manufactures and hamper the growth of indigenous industry. The 'Home Manufacturers' of England were always in a position to exert pressure on policy makers at the India office.<sup>58</sup> The stores purchase policy of the Government of India in the 19th century favoured the growth of British industry, as indents of even those articles were sent to England which were obtainable locally. Myrdal has also rightly pointed out that a metropolitan country had interest in monopolising the dependent country as far as possible, both as export and import markets. Its control of trade and payments provided ready means of securing preferential treatment for them.<sup>59</sup> Such a policy led to the decay of indigenous cottage and handicrafts industries.

There are two outstanding developments in the second half of the 19th century which can be said to have laid the foundation of modern economy in India. The first of these developments was the construction of railways. Modern large-scale industry followed the railways from the port towns to the centres of interior. Development of railways proved beneficial for agriculture, as they provided external markets for staple commodities like cotton, jute and wheat. On the negative side, by bringing in cheap manufactures, they completely ruined the well organised indigenous industries of the country and thus overwhelmed the Indian agriculture by forcing the entry of artisan classes into agriculture either as petty cultivators or as landless labourers whose condition became very pitiable. Buchanan has rightly observed that the railways which proved to be the forerunners of industrial revolution in other countries led to the destruction

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58. S.K. Sen: *Studies in Industrial Policy and Development of India*, p. 153.

59. Myrdal, *Economic Theory and Underdeveloped Regions*, p. 57.

of industrial economy of India as the alien power did not have a suitable fiscal policy of protecting indigenous industries.

The second development concerned the irrigation canals. They were mostly constructed in Western U.P., Punjab and Sind and were responsible for the emergence of a prosperous agricultural region in North Western part of the country. In the minds of most of the people, development of railways and canals is associated with the efforts of the Government to fight the famines but indirectly these developments also laid the foundations of modern economy.

However, adequate steps were not taken to transform the economy on new pattern and the process of industrialisation was slow and could not fully absorb the displaced artisans. The pressure of population on agriculture increased. In 1891, 61 per cent of the population was dependent on agriculture but by 1911, the 72 per cent of the population became dependent on agriculture. The increasing pressure on land led to numerous other weaknesses like the decrease in the size of the area of holdings and fragmentation of holding and turned it into an uneconomic occupation.

In the field of trade and industry, perhaps with the single exception of cotton textile industry, the other modern industries like jute, coal, etc., the plantations and railways were owned and operated by British and other foreign nationals. Almost the entire overseas trade was monopolised by them. Thus the fruits of trade and industry were in the main enjoyed by the foreign nationals and flowed out of the country. The foreign capital did not show impact of expansionary momentum.<sup>60</sup>

The British Government which was wedded to the policy of *laissez faire* did not take adequate steps to smoothen the process of change and promote the balanced growth of the economy. Although in the earlier period, they built up their own agriculture and industrial economy and overseas trade with the help of measures like corn laws and shipping acts designed to protect the industry. In the absence of suitable policies, the poor artisans and landless labourers suffered and the increased severity of famines during the last quarter of the 19th century was a clear cut proof of the failure of the British policy. Awakened to its neglected responsibility and the recommendations of Famine Commissions Government took a series of measures, though they did not go very far but proved beneficial.

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60. The capital, enterprise and skilled labour of a metropolitan country sent to a dependent country tended for natural reasons to form enclaves, cut out and isolated from the surrounding economy but tied to the economy of the home country. Their economic relations with the indigenous population were restricted to their employment as unskilled labour. Segregation hampered the transfer of culture, including technical skills and the spirit of enterprise to the indigenous population and did not show impact of expansionary momentum. Myrdal, *op. cit.*, p. 58.

Government had also its own difficulties in undertaking a bold policy because of the opposition of vested interests.

Thus at the close of the 19th century or at the beginning of 20th century Indian Economy presented a gloomy picture from the point of view of Indian people. The lamentations of Indian intellectual thinkers over the sad economic plight are found in the writings of Justice C. Ranade, Dadabhai Naoroji, Gopal Krishna Gokhale, etc., who propounded the theory of economic drain which contained a substantial measure of truth.<sup>61</sup>

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61. Home charges had risen from £6 million in 1856-57 to £19.4 million in 1913-14—S.K. Sen. *op. cit.*, p. 162.



## CHAPTER II

### INDUSTRIAL DEVELOPMENT

(1914 to 1933)

In the previous chapter the industrial structure of the country has been described in detail. Not only there was meagre industrial development but it also lacked the balance. Key and basic industries were conspicuous by their absence. Large-scale industries were, in the main, confined to Bombay and Bengal presidencies. The country was completely dependent for machinery stores and many consumer goods on imported supplies. So great was the deficiency that India could not produce even nails or screws.<sup>1</sup> Government stuck to the *laissez faire* policy despite heavy pressure brought to bear on the Government to initiate the industrialisation of the country on the model of Japan, Germany and U.S.A. In fine, India was a neglected country before the First World War<sup>2</sup> and the changes experienced up till this time could be described as commercial rather than an industrial revolution.<sup>3</sup> In this chapter the effect of I World War on industrial development and state policy along with the progress of important large-scale industries will be analysed.

#### Effect on First World War (1914-1918)

Imports during the war were confined to only the most essential goods on account of acute scarcity of tonnage and the difficulty of finance created by the curtailment of councils. The raids of German submarines in the Bay of Bengal and Arabian Sea for some time also checked the imports. Many of our industries were thrown out of gear by the cessation of imports of key materials like chemicals and machinery.<sup>4</sup> The outcome of war drew forcible attention to the extent of our dependence upon foreign countries for the supplies<sup>5</sup> and brought to the forefront the question of industrialis-

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1. Deficiency of the Industrial structure is well described in Chapter IV of the Report of Industrial Commission.

2. Buchanan: *Development of Capitalistic Enterprise in India*, Introductory.

3. *Ibid.*, p. 130.

4. B.P. Adarkar: *Indian Tariff Problem*, p. 474.

5. *Report of Industrial Commission*, p. 314.

ing the country for reducing dependence to such a great extent.

With the virtual elimination of imports and war demand to supply the requirements of Allies armies, an opportunity was presented to the industrialists to expand the production of existing industries and start new industries to supply goods which were hitherto imported. The development of industries was also stimulated by the activities of the Indian Munitions Board which was created in April, 1917 for supplying the requirements of Allies' armies. The Board extended assistance in importing plant and machinery and technical experts for establishing new industries and developing old ones which were essential for war.<sup>6</sup>

During the war and immediate post-war years, when imports were curtailed, the industry earned bumper profits. War led to the drastic curtailment in the exports of cotton and raw jute and mills were able to purchase their requirements at very favourable prices. Between 1915-22, cotton mills paid an average dividend of 53 per cent<sup>7</sup> while the gain to the shareholders of jute mills was 90 per cent per annum between 1915 to 1924.<sup>8</sup> Even a new company like Tata Iron and Steel Company could declare a maiden dividend in 1913-14 wherein the production of steel had started only in 1912. In the absence of any state regulation on prices and production, the industry was able to exploit the consumer mercilessly and earn abnormally high profits. There was feverish activity on the stock exchanges and prices of securities skyrocketed. Investors were no longer shy and there was no scarcity of capital for industry.

There was considerable development of industries during the period of I World War but it was not commensurate with the requirements of the country. As a result, Japan and America stepped in to supply the requirements which were hitherto supplied by United Kingdom. Shares of Japan and America in the import trade increased from 2.5 per cent and 3.1 per cent during the pre-War period to 10.1 and 7 per cent respectively. Opportunities offered by War for industrialising the country could not be fully taken advantage of for the following reasons:—

- (a) The difficulty of obtaining machinery and stores such as were not locally available.
- (b) The difficulty of procuring technical experts from abroad who were all the more needed in their own countries.
- (c) Difficulty of procuring sufficient quantity of coal and coke coupled with the difficulty of railway wagons and coastal vessels.
- (d) Shortage of skilled labour.

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6. Report of Tariff Board (1927), Vol. III, p. 468.

7. Report of the Tariff Board 1927, Vol. III, p. 468.

8. Buchanan: *Development of Capitalistic Enterprise in India*, p. 253.

### Post-War Years

After the conclusion of war, there was feverish industrial activity and attempts were made to start new enterprises both in the existing and new industries.<sup>9</sup> War time profits had blinded the eyes of the entrepreneurs and they did not take into account the changed circumstances for establishing industrial enterprises.<sup>10</sup> The sheltered market of the war years was no longer available. The manufactured goods from foreign countries began to pour in at a greatly reduced price. The high rate of exchange<sup>11</sup> further encouraged the imports. Our industries were exposed to the full blast of foreign competition to which they proved no match. No attempt was made to conserve sufficient profits to meet the exigencies of the post-war situation. The situation became really critical and a large number of industrial concerns were wiped out of existence and many were just able to keep their head above water. Years of phenomenal activity proved to be the years of phenomenal failure and as many as 4,000 companies failed between 1919-28<sup>12</sup> involving investors and speculators into huge loss. On the persistent public demand, the Government agreed to grant protection from the external competition by imposing protective duties. The principles on which protection was granted did not satisfy the aspirations of the public but nevertheless granted substantial relief. Under the protective umbrella not only the industry was enabled to withstand foreign competition but in several instances made fairly good progress. A number of new industries were also started. Number of workers engaged in large-scale industries increased. The country became self-sufficient in cement, sugar and matches and in general much greater portion of home market was captured in case of consumers goods industries. Industrial progress would have been much better but for the Depression which greatly reduced the demand of the goods. The steep fall in the prices of agricultural goods made deep inroads in the purchasing power of our people and adversely affected the progress of our industries. Wisely conceived industrial policy and favourable political situation would have further gone a long way in promoting the industrial growth of the country.

### State Policy

Under the conditions created by the war and the pressure of public

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9. During the first three years (1919, 1920, 1921): an average of 900 companies were registered every year.

10. Samant and Mulky: *op. cit.*, pp. 198 and 199.

11. The adverse impact of high rate of exchange on industry and trade is well described by Sir Purshottamdas Thakurdas in his minute of dissent to the Report of Hilton Young Commission, specially p. 120 of the Report.

12. Samant and Mulky: *op. cit.*, p. 6.

demand, the Government accepted the policy of state help in accelerating the development of the country. An Industrial Commission was, therefore, set up in 1916 to submit its recommendations with special reference to the following:—

- (a) Whether new openings for the profitable employment of Indian Capital in commerce and industry can be indicated.
- (b) Whether and, if so, in what manner, Government can usefully give direct encouragement to the industrial development.<sup>13</sup>

The question of Tariff policy was excluded from the purview of the Commission on the ground that the question of Tariff policy will be considered in a more comprehensive manner after the conclusion of War as between different parts of Empire and the rest of the World.<sup>14</sup> Besides the examination of those aspects of technical education which were considered by Atkinson-Dawson Committee and Morrison Committee were also excluded.<sup>15</sup>

The Commission drew pointed attention to the inadequate and lopsided development of industries and the dangers arising therefrom such a state of affairs. There was vast scope for the industrial development of the country and Government must take initiative in promoting such a development without which industries would not develop adequately. Development of industries which were essential for the safety of the country and were of considerable economic importance in strengthening the industrial base of the country should claim the attention of the state. The Commission emphasised that generally those industries should be promoted which are based on the raw materials available in the country and research should be undertaken to improve the raw materials. For encouraging industries, technical education should be imparted and new institutions should be established. Technical and Scientific Services should be organised by the Government of India on the model of Imperial Chemical Service. A Committee should be appointed to consider the questions of additional banking facilities and in a few cases the Government could also provide direct financial assistance in the form of guarantees of dividend, loans

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13. Report of the Industrial Commission, p. XV.

14. Sir William Clark said: "His Majesty's Government feel that the fiscal relationship of all parts of the Empire as between one and another and the rest of the World must be reconsidered after the War and they wish to avoid the raising of all such questions until that fortunate time shall have arrived." Hon'ble Rehintoola had inter alia pleaded for securing to the Government of India full fiscal autonomy specially in reference to imports, exports and excise duties.—Quoted by M.M. Malaviya in his Minute of Dissent.

15. Atkinson Committee was appointed in 1912 to enquire into the means of bringing technical institutions into close touch with the employers of labour in India. Morrison Committee submitted a report in 1913 on the system of State technical scholarship.

of money, contribution to share capital. Government assistance should be confined to only those undertakings where opportunity was given to Indian investors. Further, all indents for Government and railway stores should be met as far as practicable in India and suitable organisation for the purchase of stores was recommended. The Commission also made detailed recommendations regarding the organisation to be created at the Centre and provinces for encouraging and assisting the growth of industries. For ensuring smooth working, Commission indicated the lines along which the work should be allocated. In brief, the Commission came to the conclusion that industrial development of the country was essential and Government must take initiative in promoting such a development without which industries could not develop adequately.

Hardly were the recommendations of the Commission fully considered when a change of great importance took place. On the introduction of Reforms in 1920, development of industries including industrial research and technical education became transferred subject under the control of provincial governments. Government of India had the power to control fiscal policy and the purchases of stores in addition to the mineral development. Thus the powers of the Central Government were sufficiently curtailed.

As recommended by the Industrial Commission, a department of industries was created at the Centre in February 1921 but it had limited functions to perform in the changed circumstances. The department organised industrial conferences to discuss questions of mutual interest and took up the publication of a Journal of Industries and Labour. Industrial Intelligence Section was also added later on at the Centre. Besides Central Government also established Indian School of Mines at Dhanbad and Forest Research Institute at Dehradun. Imperial Chemical and Industrial Services could not be organised because of the opposition from provinces.

Departments of Industries were organised in nearly all provinces but in several provinces ministers for industries could not be appointed for a considerable time. Acts authorising and regulating the grant of financial assistance to industries were first passed in Madras, Punjab, Bihar and Orissa in 1923. Similar Acts were also passed in other provinces at a later stage. But the quantum of assistance provided was very meagre<sup>16</sup> and procedure for granting loans was complicated. Loans were not provided for a reasonably long period of time. Surveys indicating the scope

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16. In Madras, loans aggregating Rs. 8,27,000 were disbursed to 14 concerns up to 1934 but between 1928-34, 7 loans for Rs. 60,000 were alone disbursed. Similarly loans aggregating Rs. 6,50,000 were disbursed up to 1928 in Bihar and Orissa; and a further sum of Rs. 1,87,000 was granted up to 1934.—Information based on Bulletin No. 57 of the Department of Industries and Labour, Chapter VI.

of several industries (mainly cottage industries) were also undertaken in some provinces. In addition, 9 engineering colleges and a few technological institutes were also opened.<sup>17</sup> Provincial governments also undertook to provide scholarships on a limited scale to persons going for advanced training abroad.

Provincial departments of industries could not make any significant impact on the industrialisation of the country. From the very beginning departments were not fully equipped with experts and equipment for the tasks assigned to them because of inadequate allocations. The financial stringency reduced them to a mere skeleton. There was also no coordination in the policy followed by different provinces and the Central Government could not evolve any co-ordinating policy in the absence of mutual trust and confidence. Even the convening of industrial conference was discontinued after 1922 till 1933.

### Protection

Up till now, the fiscal policy of the Government of India had remained largely of free trade in its orientation and the revenue of the Government rather than the wealth of people was the dominating consideration.<sup>18</sup> There was great agitation in Indian public which demanded that the Government should abandon its *laissez faire* policy and adopt a protectionist policy,<sup>19</sup> the need for which was also fully recognised by the authors of the Report on Indian Constitutional Reforms. Fiscal Autonomy Convention held in 1919 also stressed the need for granting full autonomy. The deteriorating economic situation on account of severity of foreign competition imported further urgency. Under these circumstances, the Government announced the appointment of a Fiscal Commission to recommend suitable tariff policy including the desirability of adopting the principle of Imperial Preference.<sup>20</sup>

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17. *Ibid.*, p. 14.

18. The Tariff Policy of the Government of India was dictated by the revenue consideration as customs duties were an important source of revenue for the Central Government. In 1859 import duties were raised to meet the charges occasioned by the Mutiny and were again lowered when the financial position of the Government became comfortable. Between 1882 to 1894, no import duties were levied except on a few articles. Again owing to the fall in the sterling value of the rupee in 1894, a general rate of 5 per cent was announced on all imports with a few exception. During the I World War, Government of India raised the general rate of duty from 5 to 7½% to meet the financial burden of the War. The system of levying duty was not devised with a view to raise the industrial production in the country.

19. B.P. Adarkar: *Op. cit.*, p. 475.

20. Report of the Fiscal Commission 1921-22, p. 6.

Like Industrial Commission, Fiscal Commission concluded that industrial development of the country has not been commensurate with the size of the country, its population and its natural resources.<sup>21</sup> The Commission was impressed with the astounding progress made by Germany, France, U.S.A. and Japan under protective tariff. The majority of the Commission recommended discriminating protection to industries and laid down the following formula for granting protection<sup>22</sup>:-

- (1) "The industry must be one possessing natural advantages such as an abundant supply of raw materials, cheap power, a sufficient supply of labour or a large home market.
- (2) The industry must be one which without the help of protection is not likely to develop at all or is not likely to develop so rapidly as is desirable in the interests of the country.
- (3) The industry must be one which will eventually be able to face world competition."<sup>23</sup>

A permanent Tariff Board was recommended to investigate the claims of industries and advise the Government in carrying out the policy of protection. The Commission was also rightly convinced that the mere imposition of protective duties, however scientifically contrived, will not by itself produce that full industrial development<sup>24</sup> and therefore recommended several supplementary measures for promoting the growth of industries. The Commission felt the need for greater bias in the education for industrial pursuits and replacement of imported skilled labour. Suitable changes in railway rates and protection of home industries from unfair foreign competition were recommended. (Paras 133 to 141 of the Report of the Commission).

The Minority<sup>25</sup> objected to the policy of Discriminating Protection on the ground that it mixed up the policy with procedure and obscured the vital issue of the problem and recommended that the policy of protection should be adopted in the best interest of India and discrimination must vary according to the circumstances for the time being, and should not be applied on the lines indicated in the Report.<sup>26</sup> Further, the minority was also against Imperial Preference and wanted certain condition to be imposed on foreign capital.<sup>27</sup>

21. Report of the Fiscal Commission 1921-22, p. 12.

22. *Ibid.*, pp. 49-50.

23. *Ibid.*, p. 152.

24. *Ibid.*, p. 65.

25. A Minute of Dissent was appended by (1) Ibrahim Rahimtoola—President, (2) T.V.S. Ayyar, (3) G.D. Birla, (4) Jamnadas Dwarkadas, and (5) Narottam Morarji.

26. *Vide* Minute of Dissent on pp. 160-61 of the Report.

27. The Minority wanted the following conditions to be imposed on  
(Contd. on next page)

The policy of discriminating protection, as recommended by the majority of the Commission, was accepted in the Budget Session of 1923 with some additional limitations. The Resolution adopted by the Assembly did not refer to the other non-fiscal recommendations which were considered equally important by the Commission. Further, the Government appointed only *Ad hoc* Board in contravention of the recommendations of the Commission.

On a critical examination of the fiscal policy adopted by the Government one comes to the conclusion that protection was not conceived as an instrument for industrialising the country but was largely of safeguarding variety under which certain industries were enabled to withstand foreign competition if their case was found suitable for protection.<sup>28</sup> This was admitted in 1930 by Sir George Rainy, the then Commerce Member. Naturally, it was not possible to develop basic and key industries, with the result that there was lop-sided industrial development.

Conditions imposed by the Fiscal Commission for the grant of protection proved very rigid in practice. There is sufficient evidence to prove that an industry can reach a high level of efficiency without having sufficient supply of raw materials or an extensive home market. Even Tariff Board on Heavy Chemical Industry came to the conclusion that 'if the policy of discriminating protection were so interpreted as a condition precedent to the grant of protection, we have upon a careful review of our inquiries during the last 6 years no hesitation in stating that under modern conditions scarcely any industry could fully establish its claim for protection.'<sup>29</sup> Tariff Board had, therefore made a liberal interpretation of the conditions where protection was otherwise justified on other grounds. The system of Imperial Preference on British imports further whittled down protection and had India been free the system of pure protection could be directed as much against England as against the rest of the world.<sup>30</sup> The Government had also the power to reject the application of any industry if no *prima facie* case, was made out for protection.

In working of the policy there were considerable delays in arriving

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foreign capital: (1) Such Company should be incorporated and registered in India in rupee capital, (2) There should be a reasonable proportion of Indian Directors on the Board, (3) Reasonable facilities should be offered for training of Indian apprentices. (*vide* p. 162 of the Report).

28. Report of the Fiscal Commission 1949-50, p. 50.

29. Quoted by Indian Merchant Chamber, Bombay in its written evidence to the Fiscal Commission 1949—reported on p. 133, Evidence Volume II.

30. R. Lethbridge: *The Indian Offer of Imperial Preference*, Introductory.



at decisions.<sup>31</sup> In some cases, Government refused to accept the recommendation of the Tariff Board by adhering rigidly to the triple formula (e.g., glass, wool industries). No wonder, therefore, the policy of protection did not promote rapid industrial development.

### INDUSTRIAL PROGRESS DURING THE PERIOD

Now we shall review the progress made by important industries during this period. Several industries like Iron and Steel, Cotton Textiles, Sugar, Match and Paper Industries were granted protection and made considerable progress during this period despite the fact that there was a considerable decline in industrial production in other countries due to the severity of depression which enveloped the whole world.

#### Cotton Textiles

The First World War offered an unprecedented opportunity to expand production and earn huge profits as the imports of piece-goods and yarn were drastically curtailed. Productive capacity could not, however, be expanded to any significant extent because of the difficulty of importing machinery and equipment. Cotton mills simply minted money<sup>32</sup> as cotton prices and wages did not rise in proportion to the prices of cloth and yarn which had risen between 2-3 times. But the industry did not observe canons of financial prudence by creating adequate reserves for future expansion and contingencies. The prosperity continued even in the immediate post-war years. Large extensions were, therefore, planned and in 1922 as many as 44 mills were under erection.

By 1923 the tables had turned. The imported goods began to pour in and the industry had to face stiff competition from Japanese textile industry. The rapid progress of the Japanese industry affected not only our overseas markets but also industry in our own country. The menace of Japanese competition was recognised both by the Tariff Board and Mr. Hardy. After Hardy's report import duty was raised from 11 to 15 per cent on British goods and 20 per cent on non-British goods. Owing to financial stringency duties were raised by 5 per cent in 1931 and a surcharge of 25 per cent was imposed in the Supplementary Budget of that year. Later on duties were raised to 75 per cent *Ad Val.* (subject to a minimum specific duty of 6½ as. per lb.) when Japan resorted to dumping.

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31. Firstly, time was taken by the Government in referring the case to the Tariff Board. Secondly, considerable time was taken by the Board in conducting the investigation. Thirdly, Government also took time in arriving at the decision on the recommendations of the Board.

32. During the 8 years ending 1922 cotton mills distributed a sum of Rs. 50 crores on an average capital of Rs. 12½ crores. Report of the Tariff Board 1927, Vol. III, p. 468.

Despite foreign competition and depression the textile industry made substantial progress as would be clear from the following table:—

<i>Year</i>	<i>No. of Mills</i>	<i>No. of Spindles (000)</i>	<i>No. of Looms (00)</i>
1913	240	6,485	1,010
1933	320	8,847	1,773
% Increase	.33	20	75

It would be observed that there was proportionately much greater increase in the number of looms installed as against the spindles. This indicates inefficiency as export of yarn was diminishing in the face of Japanese competition and the industry began to feed the home market under the protective umbrella. As a result foreign imports of piecegoods were reduced to 20 per cent of the total requirements as against 57 per cent on the eve of First World War. Considerable progress was also made in the production of medium and fine yarn.<sup>33</sup> In place of fine yarn the country now began to import more of long staple cotton whose imports increased from £1,81,819 in 1913-14 to £26,67,751 in 1933-34.<sup>34</sup>

Another noteworthy feature was the dispersal of the industry from Bombay to other provinces and princely states.<sup>35</sup> The Bombay section of the industry was rather more adversely affected by competition<sup>36</sup> and the

### 33. Imports and Production of Cotton Yarn in 1913-14 and 1935-36

<i>Quality of Yarn</i>	<i>1913-14</i>		<i>1935-36</i>	
	<i>Qty. (M. lbs.)</i>	<i>%</i>	<i>Qty. (M. lbs.)</i>	<i>%</i>
1	2	3	4	5
No. 26—40s.:				
Indian production	62.7	69.64	238.0	91.4
Imported Yarn	27.3	30.36	22.3	8.6
Nos. 40s. and as above :				
Indian	2.7	25.56	58.5	72.9
Imported	7.9	74.44	21.7	27.1

34. *Hand Book of Commercial Information*, II Edition, p. 124.

35. Following Table shows the dispersion of the industry:—

<i>Year</i>	<i>Total Production</i>	<i>Bombay</i>	<i>Madras</i>	<i>U.P.</i>	<i>Punjab</i>	<i>C.P.</i>	<i>States</i>
1	2	3	4	5	6	7	8
1913-14	683	480	45	44	6	37	38
1932-33	1016	559	105	101	32	45	131

36. The reasons of depression in cotton industry of Bombay island have been well described in the Report of the Tariff Board (1927).

number of mills declined in Bombay while there was substantial increase at other centres. The factors that favoured the concentration of mills at Bombay in the earlier period began to lose significance. It was now advantageous to locate the mills in cotton-growing areas where wages were cheap and cloth could be easily sold. With the development of hydro-electric power in South India, the industry migrated to Madras and Mysore. Princely states also provided several concessions to attract the industry where labour laws were also lax.

Import duties, though imposed belatedly, were high enough to protect the industry from foreign competition and Swadeshi Movement also helped the growth of the industry. The growth of the industry would have been more rapid but for the following factors:—

1. For improving the quality and reducing the cost of production, mill managements did not emulate the superior organisational methods and adopt the latest type of machinery. The efficiency of Japanese textile industry was worth emulating.<sup>37</sup> Machinery was not discarded until it became unworkable—and hardly any amount worth the name was set aside for research and development even in prosperous time.<sup>38</sup> Various reports of the Tariff Board pinpointed the malady but no serious effort was made to put the house in order. The suggestion of 1927 Tariff Board for having at least one Director well versed in the technical side was not also implemented.

2. Since the industry failed to remedy the defects pointed out by the various Tariff reports in the organisational structure of the industry, it was essential for the Government to regulate the industry for ensuring healthy development. This was specially important for protecting the interest of the poor consumer. Yet no attempt was made by the Government in this direction. The Hon'ble Mr. Ziauddin had rightly advocated the need of a permanent body to watch and control the situation in the cotton industry.<sup>39</sup> But the mills were reluctant to have the government

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37. The labour efficiency in Japanese Industry was superior as an average labourer in Japan looked after 5.5 Looms at an efficiency of 95 per cent in comparison to the Indian workers who looked after 2 looms with an efficiency of 80 per cent. General adoption of War motion and the Automatic looms further reduced the cost of production. Besides Japanese Mills were able to effect economy by organising purchase and sales operations on a joint basis. *Vide* Report of the Tariff Board 1932, pp. 113 to 119.

38. H.L. Dey: *Op. cit.*, p. 136.

39. *Vide* Speech of Ziauddin Ahmed in Legislative Assembly on 12th April, 1934.

Shri N.M. Joshi speaking on Tariff Amendment Bill 1934 had also suggested the need of State Control and stated that new mills should be

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control. Government also did not command the confidence of the public because of the way in which it had favoured Lancashire interest in subordination of Indian interest.

3. The Great Depression had impoverished the consumer so severely that prices had to be cut down substantially<sup>40</sup> and the off-take was reduced to the lowest limits.<sup>41</sup> It is no doubt true that soundly organised mills were able to earn profit and declare reasonable dividend<sup>42</sup> in the depression period as well but the financial position of a large number of mills was precarious as the value of cotton and cloth had to be written down constantly.

4. There was paucity of specialised financial institutions to provide timely financial assistance on long term basis at reasonable rate of interest. Public deposits also shrank on account of the loss of confidence of depositors.

5. There was lack of cooperation in industry. With good cooperation, the severity of the competition could be reduced and considerable economies effected in production and selling expenses.

### Jute Tetiles

First World War increased the demand of jute manufactures for military requirements as well as for exports. To economise shipping space the export of jute manufactures in place of raw jute was encouraged.<sup>43</sup> Indian Jute Mills Association which represented nearly all mills was able to exploit the farmers by offering low prices for the raw jute as the foreign markets were closed for them. There was need for state control on the prices of raw jute to ensure a fair deal to the farmers. But the industry was mainly British owned and Government could ill afford to displease the British capitalists. It was the best organised and most prosperous industry.

The industry was faced with a crisis when the war orders ceased. Pro-

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permitted only when they were of optimum size and were located in suitable area.

Shri Thompson in his Minute of Dissent in Select Committee on Tariff Amendment Bill, 1934 had stated the need of state control to pull the industry out of moribund conditions.

40. Report of the Tariff Board (1932), p. 119.

41. Evidence of Bombay Millowners Association to Tariff Board 1934, Vol. I, p. 3.

42. *Vide* the evidence of Ahmedabad Mill Owners Association and Chief Commission of Delhi submitted to the Tariff Board, 1934.

43. In the year 1913-14, raw jute and manufactured jute exports constituted 52.5 and 47.5 per cent of the total exports while in 1918-19 the proportion became 19.5 and 80.5 per cent respectively.

duction was far in excess of the world's dislocated trade requirements.<sup>44</sup> To adjust the production to world demand, an agreement was arrived at in December 1921 to work 54 hours a week. After some time the demand of jute goods picked up with the revival of international trade. The industry continued to make fair progress till it was affected by the world depression. The price fell and profits dwindled from Rs. 723 lakhs in 1928-29 to Rs. 100 lakhs in 1931-32.<sup>45</sup>

The following table indicates the progress of industry during the period under review:<sup>46</sup>—

Year	No. of Mills	No. of Spindles	No. of Looms	Qty. of Jute consumed
1914-15	70	796	384	24.3
1918-19	76	840	400	24.98
1921-22	81	908	430	21.18
1929-30	98	1,140	539	31.23
1933-34	99	1,202	605	20.99

The table given above clearly indicates that the industry suffered from excess capacity which was the result of huge profit earned by the mills. There was need to scrap the excess capacity and prohibit the establishment of new mills. But the adjustment was sought to be made by reducing the hours of works and the number of working days which increased the cost of production. Even during the depression period of 1929-30 the number of spindles and looms continued to increase while consumption of raw jute was severely reduced. Despite bumper profits,<sup>47</sup> mills did not spend any significant amount for research. In fact, mills in Europe produced better quality goods and found out new uses of jute for blending it with wool and silk. . But no progress was made in the country in this direction.

### Iron and Steel Industry

Prior to World War I, Bengal Iron Company was engaged in the production of pig iron. Tata Iron and Steel Company commenced produc-

44. D.R. Wallace: *Romance of Jute*, p. 74.

45. Buchanan: *op. cit.*, p. 251.

46. Handbook of Commercial Information (3rd Edition), p. 151.

47. Between 1915 and 1924, the total gain to the shareholders was £300 million or 90 per cent per annum—probably the highest rate of return in the world and yet jute companies possessed excellent reserves and even in worst years of depression most of jute mills were able to declare fairly good dividend. (Information collected from *Development of Capitalist Enterprise in India*, p. 253 by Buchanan and from the book of P.S. Loknathan: *Industrial Organisation in India*, pp. 291-295.

tion of pig iron in December 1911 and that of steel in 1912 and was in the initial stage of production. The War created abnormal demand by cutting off foreign supplies; besides Government requirements of steel rails also increased.<sup>48</sup> The prices of steel products became very high, e.g., the prices of merchant bars which were Rs. 109 annas 4 per ton in 1914-15 rose to Rs. 800 per ton in 1918-19.<sup>49</sup> The production capacity was fully utilised. The Tata Iron and Steel Company was able to declare a maiden dividend of 6 per cent on ordinary shares in 1913-14 which would have been otherwise impossible. The rate of dividend on ordinary shares was stepped up to 20 per cent in 1916-17 while deferred shares received a very high dividend of 291 per cent. But the company did not care to conserve profits for the future.

Under the influence of war time profits, Tata Iron and Steel Company planned to expand the capacity of its works from 1,26,000 tons to 4,20,000 tons per annum. Orders for machinery were placed in 1917-18 but extensions could not be completed before 1924 as American suppliers were unable to supply the machinery early on account of heavy pressure of orders. Besides, a number of subsidiary companies were established at Jamshedpur for the regular sale of the steel. Two more companies, i.e., Indian Iron and Steel Company and Mysore Iron and Steel Works were also established in Bengal and Mysore after the I World War. Both these companies were engaged in producing pig iron and pig iron products. Barring a few small rolling mills, steel was produced only by TISCO. Pig iron could be produced in the country at competitive prices and was exported to England and other countries but the cost of producing steel was higher than in other countries.

After 1921, the industry was faced with a crisis which was partly due to the enlarged production capacity of the world in steel and partly to the great technological improvements in foreign steel works. The prices collapsed, e.g., the price of bars which was as high as Rs. 800 per ton came down to Rs. 130 per ton by 1924-25 and Tata Company had to skip the dividend. Cost of production was much higher in the company because of its low technical efficiency<sup>50</sup> and higher cost of extensions which were planned in the boom period.

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48. Government purchases during the World War I amounted to 2,90,000 tons of steel rails at an average price of Rs. 150 per ton. The quantity was in excess of agreement according to which only 20,000 tons of steel were to be purchased every year.

49. B.P. Adarkar: *Indian Tariff Problem*, p. 102.

50. The Tariff Board 1924 pointed out that old mills can no longer compete with more modern machinery and their continued operation is a source of weakness to the company—*Vide* the Report, p. 17. Even the extensions were not very efficiently planned and production cost did not compare favourably with those of Continental Europe.

It was under these circumstances that the industry submitted its claim for protection in 1923. The Board recommended the levy of specific duties varying from Rs. 25 to Rs. 45 per ton on different categories of steel. The protection was extended for 3 years under Steel (Protection) Act. There were two more main inquiries in 1927 and 1934. In between these were three supplementary inquiries. Government was sympathetic and granted timely assistance. It is certain that but for the protection, the steel industry could not have survived in the country.

Under the aegis of protection, very appreciable progress was made by the industry during the period under review. Even during the depression, when the demand for iron and steel products had dropped, the production was maintained at a satisfactory level in the country and main burden of the reduced demand was borne by the imported steel. Tata Iron and Steel Company was working at 75 per cent capacity as against 35 in Germany, 24 in U.S.A. and 54 in U.K.<sup>51</sup> The main lines of production were rails and fish plates, structural sections, bars, plates, black and galvanised sheets. A major portion of requirements in these lines was produced in the country. Tariff Board (1927) estimates regarding the progress of the industry were more or less realised.<sup>52</sup> The company was able to effect 25 per cent to 40 per cent reduction in works cost between 1926 and 1933 and the actual prices were lower than revised estimates of the Tariff Board.<sup>53</sup> But even so, the production cost was much higher than the prices of imported supply and the weakness was more pronounced in case of black and galvanised sheets, where it was cheaper to export bars to England and import sheets made therefrom.<sup>54</sup> Steel Smelting Section of the plant was another weak spot. The industry continued to depend on foreign technicians and managers who had to be paid huge salaries.

### Cement Industry

Before the First World War, the country was mainly dependent on

51. Report of Tariff Board 1934, p. 12.

52. Estimates of Production made by Tariff Board 1927 were exceeded in case of structural section plates and black sheets. There were however considerable lags in the production of rails, fish plates, and slippers because of the reduced Government purchases.

53. Tariff Board 1927 had prepared cost estimates for 1933-34 on the assumption that prices of coal and spelter would be Rs. 8 and Rs. 555 per ton but these prices were reduced to Rs. 5.21 and Rs. 235 per ton respectively. Even on the basis of the revised prices Tariff Board 1934 came to the conclusion that except in case of rails and fish plates, the prices were lower than the revised estimates. The coal consumption per ton of rolled steel was 4.9 tons in 1925-26 and 1932-33 it was reduced to 2.87 per ton of rolled steel.

54. B.P. Adarkar: *op. cit.*, pp. 77-79.

imported supplies of cement as there was only one small factory in Madras. On the eve of War, three factories were established in Katni, Lakheri and Porbander in 1912 and 1913. World War I imparted great stimulus to the industry as the imports were drastically curtailed. Seven new factories were established after the War and thus there were ten factories which produced 2,64,000 tons of cement in 1924 against their rated capacity of 5,50,000 tons.<sup>55</sup> These factories were not set up after carefully considering the market aspects and there was therefore great internal competition among them. There were no cement works in the vicinity of port towns which were the principal consumers of cement.<sup>56</sup>

The industry submitted its case for protection which was referred to the Tariff Board in April 1924 by the Government. The Tariff Board submitted its report in February 1925 and recommended (a) a bounty of Rs. 8 per ton on cement sold in port town and a specific protective duty of Rs. 9 per ton or (b) alternative protective duty of Rs. 12 per ton and a bounty of Rs. 5 per ton. Government did not take any action on the recommendations of the Board but when the prices of cement fell, the *ad-valorem* duty was converted into a specific duty as desired by the Board.

In order to regulate their productions in relation to the demand, cement manufacturers formed a pool by forming Indian Cement Manufacturers Association and in 1930 Cement Marketing Company of India was formed to take over the sales and distributions of cement manufactured by all the companies. The company succeeded in regulating the production of cement and also reduced transport charges by allocating the market areas.

The following table<sup>57</sup> indicates the progress of the industry during the period under review:—

Year	(000 tons)		
	<i>Production in India</i>	<i>Imports</i>	<i>Total</i>
1914	.9	150	151
1919	87	83	170
1924	264	88	352
1929	561	75	636
1933	642	49	691

55. Chowdhary: *Industrial Evolution of India*, p. 159.

56. There was no cement works within 350 miles of Calcutta and 250 miles of Bombay. These two cities consumed nearly half of the total production.

57. Table adapted from B.P. Adarkar's book—*Indian Tariff Problem*, p. 342



### Match Industry

The real development of match industry started in 1922 when a very heavy duty of Rs. 1.50 P. per gross was levied on import. At first, veneers and splinters were imported from Japan and other countries but when duty was imposed on them also, the manufacturers began to exploit local resources of wood.<sup>58</sup> The development of industry was so swift that imports which amounted to £2,048,323 in 1919-20 were reduced to £374 by 1932-33.<sup>59</sup>

Taking advantage of protected market, the Swedish Match Company started six match factories in the country and some Japanese manufacturers also put up their factories. Swedish company began to crush Indian manufacturers by unfair means like offering prizes and presentations to dealers on the condition that they would not sell the matches of other manufacturers.<sup>60</sup> In course of time, this company gained dominant position by suppressing the indigenous manufacturers. Thus, the benefit of protected market could not be enjoyed by the Indian capital as was visualised by Fiscal Commission 1921-22.

### Miscellaneous Industries

In addition to the above industries, other industries also recorded progress. Paper industry increased its production from 29.4 thousand tons in 1919 to 43.4 thousand tons in 1934. In respect of protected varieties it could meet about 3/4ths of the total demand. To encourage the use of indigenous pulp a duty was levied on imported pulp. Even in the pre-protection era, sugar industry made considerable progress on account of high revenue duties and the production increased to nearly 4 times between 1920 to 1930. Industries engaged in processing agricultural goods like cotton gins, jute presses, rice mills, also recorded progress. Railway workshops and engineering industries also recorded appreciable growth and the number of persons engaged increased from 99,000 and 23,000 in 1911 to 1,21,000 and 62,000 in 1931 respectively. Among the mining group of industries, the production of coal increased by a third and in 1930 stood at 24 million tons. Thereafter, there was decline on account of the effects of depression and production came down to 20 million tons in 1933.

### FOREIGN TRADE

Foreign trade of the country was considerably curtailed during the First World War. In terms of 1913-14 prices, it was reduced to 60 per

58. Chowdhary, *op. cit.*, p. 161.

59. *Hand Book of Commercial Informations*, III Edition, p. 128.

60. *Vide* Speech of Chowdhury Mohd. Ismail Khan on Excise Match Bill, 1934.

cent by 1918. The fall in exports was due to the stoppage of trade with the enemy countries, difficulties of tonnage and finance and the policy of the Government to restrict trade in foodstuffs and war materials even with neutral countries from where these goods could pass on to enemy countries. As regards our imports, United Kingdom which was our principal supplier, could not supply our requirements owing to her pre-occupation with the War. The United States of America and Japan, therefore, stepped in to supply our requirements and their shares in our import trade increased from 2.6 per cent in each case to 9.5 and 15 respectively.

After the War was over, there was hectic activity. Due to rise in the price of silver, exchange rate increased to more than 2 shillings and imports from foreign countries considerably increased. Our industries which were starved of equipment and machinery during the War period placed huge orders for their requirements on account of pent up demand. This resulted in the adverse balance of trade—a phenomenon that was rare at that time. Soon after, the exchange rate began to decline and there was a financial crisis in 1921-22 which adversely affected our foreign trade. Between 1923-24 and 1928-29, our exports specially of cotton, jute and foodgrains considerably increased due to greater demand in foreign countries for raw materials. Exports of cotton yarn and opium declined. The fixation of exchange rate at 1sh. 6d. on the recommendation of Hilton Young Commission in place of 1sh. 4d. rate prevailing before the War also adversely affected our foreign trade. Depression of 1930 further seriously crippled our exports of jute, cotton tea and oilseeds and brought great misery to our farmers. There was greater decline in the prices of raw materials and foodgrains, in comparison to the prices of manufactured goods. Terms of trade became unfavourable.

Due to development of cotton, iron and steel, match industry and sugar industry, etc., our dependence for these items on foreign countries had been very substantially reduced. On the other hand, there was greater demand of machinery, hardware, dyeing substances, mineral oil, chemicals rubber goods, etc., for our growing industries. As we began to spin yarn of fine quality, the imports of long staple cotton also increased. Growing literacy and industrialisation also stimulated the paper imports.

The following table shows our exports and imports during the period under review:—

<i>Year</i>	<i>Imports</i>	<i>Exports</i>	<i>Balance</i>
1909-10 to 1913-14	132,580,000	155,034,658	32,454,658
1914-15 to 1918-19	132,213,782	155,421,520	23,207,738
1919-20 to 1923-24	212,844,669	213,000,540	155,871
1924-25 to 1928-29	213,086,934	249,745,593	36,658,659
1929-30 to 1933-34	130,897,704	180,624,712	49,727,008

The table given above indicates the continuation of trend that was witnessed during the earlier period, i.e., both imports and exports continued to grow. But the trend was reversed during the depression when both exports and imports declined. Except in the quinquennial period of 1919-20 to 1923-24 when the trade was almost balanced due to the increased demand to meet the accumulated War time demand, the balance of trade has always been favourable.

There were several changes in the direction of trade. The United Kingdom which supplied 64 per cent of requirements on the eve of war accounted for 37 per cent of imports in 1932-33. Japan and U.S.A. each of which accounted for 2.6 per cent share increased their contribution to 15 and 9 per cent by 1932-33. The imports from Java and Mauritius declined because of the development of sugar industry in the country while Iran improved her share because of the greater imports of mineral oil due to the development of land transport.

As regards the distribution of export trade, the United Kingdom which took about 1/4th of our exports during the pre-war period now took about 1/3rd of our exports. Shares of Continental countries declined. Formerly our country had a favourable balance of trade with these countries which they could not afford because of exchange difficulties. They also retaliated because of differential treatment accorded to their imports. Export to Hongkong declined because of the stoppage of yarn imports on account of Japanese competition. Decline in Japanese share is due to her boycott of our cotton in protest of very heavy duties on Japanese cloth.

The following table shows the per cent wise distribution of our export and import trade with some important countries:—

<i>Countries</i>	<i>Year</i> 1913-14		<i>Year</i> 1918-19		<i>Year</i> 1932-33		<i>Year</i> 1933-34	
	<i>Export</i>		<i>Export</i>		<i>Export</i>		<i>Export</i>	
	<i>Import</i>		<i>Import</i>		<i>Import</i>		<i>Import</i>	
United Kingdom	23.4	64.1	29.2	45.5	28	36.8	32.2	41.3
Germany	10.6	6.9	..	..	6.5	7.8	6.5	7.7
Japan	9.1	2.6	12.1	19.8	10.3	15.4	8.5	14.2
U.S.A.	8.7	2.6	13.8	9.5	7.4	8.5	9.6	6.2
Belgium	4.8	2.3	.004	0.83	8.3	2.6	3.0	2.3
Italy	3.1	1.2	4	.5	3.5	3	3.8	2.5

Two new features of the trade were:—

(i) Imperial Preference, (ii) Ottawa Agreement. Both had the similar aim of encouraging the exports of British manufactures in our country which were unable to compete with the manufactures of Continental

countries and Japan. These measures proved subordination of Indian interest to British interest.

Under Imperial Preference less import duties to the extent on 1/3rd or more were imposed on several British goods. Indian Government thus sought to give definite advantage to British manufacturers without any corresponding advantage in return.

Under Ottawa Agreement, goods which were already duty free were allowed free entry and certain items like raw jute, shellac, myrobalans and mica were also admitted duty free in England. Preference to Indian goods was to be accorded at 10 to 20 per cent. In exchange India had to give 10% preference on articles given in List IV of the Agreement which covered 106 items; while rates on cotton piece-goods varying from 15 to 17½ per cent *Ad Val.* were fixed. The British sources claimed that this Agreement was to the advantage of India but as subsequent events proved that according to the terms of the agreement, England gained more than India. 82 per cent of India's imports were covered under the agreement and therefore India had no scope left for negotiating deals with other countries in exchange of her raw materials and foodgrains. Moreover, items on which preference was accorded met with the severest competition from Continental and Japanese goods; but many of the items on which preference was accorded to India were produced within the Empire countries and thus preference was whittled.<sup>61</sup> In items like raw jute, myrobalans, shellac and mica, India had the monopoly and therefore preference was meaningless. Tea exports benefited more by International Tea Agreement than by Preference.<sup>62</sup>

### IMPACT OF INDUSTRIALISATION

Decay of indigenous industries and increasing dependence on agriculture during British regime were severely criticised by Indian national opinion and the various Famine Commissions appointed by the Government had also exposed the dangers of excessive dependence on agriculture and advocated industrialisation of the country to absorb the surplus population. The Government of India stuck to its *laissez faire* policy and was indifferent towards this question. World War I had exposed the danger of extreme dependence on imported supplies. As a result, there was a change in the attitude of Government. Since policies were not wisely conceived and effectively implemented the process of industrialisation could not gather great momentum and make significant impact on the occupational pattern of the economy.

During the period under review there was not much change in the

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61. B.K. Madan: *Imperial Preference*, p. 242.

62. Adarkar, *op. cit.*, p. 562.

industrial structure. With the exception of iron and steel industry, there was hardly any organised industry manufacturing producer's goods. Industrial development was confined to production of consumer's goods like cotton and jute manufactures or for processing agricultural materials and mining and quarrying. Industrial Commission had specially emphasised the need for developing chemical, steel and engineering industries which were in the nature of basic industries but their expectations did not materialise.

As regards the growth of industries, it is no doubt true that number of workers engaged in factories (excluding mineral industries and plantations) increased from about a million to  $1\frac{1}{2}$  million. Cotton, jute, flour mills, sugar mills, iron and steel, metal industries, engineering workshop and ordnance factories were employing a much larger number of workers than before. The country became almost self-sufficient in cement and matches. There was tendency for gradual displacement of imported consumer goods by local production. Jute and plantation industries were also in a position to export substantially greater quantities to foreign markets as their productive capacity considerably expanded. The number of persons engaged in the exploitation of minerals increased from 308 lakhs to 347 lakhs between 1911 and 1921 but thereafter there was no increase in the number of workers employed in minerals.

Despite the growth of factory industries, the number of persons dependent on industries declined both relatively and absolutely. The same percentage of population continued to remain dependent on agriculture. There was no diversification in occupational pattern. The following table throws interesting light on occupational pattern:—

	<i>(Figures in Lakhs)</i>	
	1911 Census	1931 Census
Population	3150	3520
Workers	1488	1539
Workers engaged in exploitation of :		
Minerals	3.08	3.48
Industry	175	153
Transport	23	23
Trade	81	79

The above figures clearly indicate that persons dependent on industry and trade declined while the population of the country increased by about 12 per cent. Though factory industries increased but yet the period witnessed the decline of cottage and small scale industries on account of the competition of factory made goods. The flooding of cheap Japanese goods also adversely affected the position of cottage industries. Despite the

growth of factory industries only 1 per cent workers were dependent on factories for their employment. Even presuming that 1931 was not a normal year as our industries were affected by the reduced purchasing power of the cultivator and intense competition of foreign imports, we can at best conclude that there was no change in the occupational pattern and India's industrial development was inadequate in relation to her population and resources.

### CHAPTER III

## AGRICULTURAL DEVELOPMENT

### (1914-1933)

From the beginning of the present century, there was a growing realisation on the part of the Government to retrace its agricultural policy and improve the lot of rural population. The growing demand for our agricultural produce in foreign countries stimulated prices and benefited the cultivators. A practical proof of the better condition of the rural masses was found during the famines of 1908 and 1913 when there were no starvation deaths on a mass scale. In this chapter, it is proposed to review the main developments in the agricultural sector of our economy during this period.

#### Effect of First World War

At a time when the favourable factors were operating for the benefit of our cultivators came the World War. The immediate impact of the war was none-too-favourable for agricultural prices. Exports to enemy countries were stopped and drastically curtailed for other countries because of shipping difficulties. As a result, the exports of cotton, oilseeds, jute, rice and other agricultural raw materials were considerably reduced and led to decline in their prices and affected the income of cultivators. The price of Broach Cotton at Bombay declined from Rs. 115 per candy in 1914 to Rs. 76 per candy in 1915; while the prices of raw jute at Calcutta came down from Rs. 93 to Rs. 54 per bale during the same period. The production of both these commodities declined from 52 lakh and 104 lakh bales to 37 and 73 lakh bales during the war period. Jute cultivators were squeezed by the monopolistic position of Indian Jute Mills Association whose members offered low prices for raw jute and earned record profits. Similarly cotton textile industry exploited the situation much to the detriment of the farmer. Government failed to ensure fair prices to these cultivators. The income of the cultivator was reduced because of a fall in the agricultural prices but he was required to pay much higher prices for the cloth and other articles for his requirements whose imports were drastically curtailed. There was no statutory regulation on the prices of consumer goods and the farmer was left to be exploited by the trader

who took full advantage of the opportunity by charging exorbitant prices. The levy of additional taxes by the Government for meeting the cost of maintaining troops further affected the income of the cultivators.<sup>1</sup> There is, thus, no truth in the contention that the economic position of the farmer improved during the war period. In fact, mobs became unruly at several places in the South India on account of the deteriorating financial position and apprehended riots had to be suppressed by force.<sup>2</sup>

### Agricultural Production, Famine Relief and Prices

The harvests during the war years were normal and the country did not face any scarcity. But during the year 1918-19 monsoons failed and the harvests were among the scantiest known. The net area sown declined to 201 million acres as compared to 227.8 million acres in the preceding year. The production of rice, wheat, jowar, bajra, and cotton, etc., declined and their out-turns were lowest on the record during the last decade. The crop deficiency affected almost all parts of the country except North East India and Burma<sup>3</sup> where conditions were not so bad.

The country was under the grip of a major famine comparable to that of 1877-78 or 1899-1900. Government abandoned its old policy of non-interference in the foodgrain trade and restricted the export of the foodgrains. It also arranged for the imports of Burmese rice and Australian wheat. The system of exports and price control was also extended to Burma which facilitated the diversion of Burmese rice to India. Foodgrains import amounted to 59,482 and 1,67,446 tons during 1918-19 and 1919-20 as compared to mere 4,395 tons in 1917-18.<sup>4</sup> The despatch of grains by railways was also controlled to prevent its being held up by speculators and transported from areas of deficit harvests to other places where the people were able to pay inflated price.<sup>5</sup> Government also followed liberal policy in respect of revenue remission and suspension. As a result of Government measures and better resistance of farmers country was able to face the calamity successfully and the number of people attracted to relief work was much less than that of 1899-1900.

Again, the premature cessation of the monsoon in 1920 caused widespread failure of the autumn harvests in Northern, Western and Central

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1. A rough idea of adverse economic position of the peasant can be had from the index numbers of export and import articles. The index numbers of export articles increased from 160 to 199 (base year 1880) between 1914 and 1918 while index numbers of import articles increased from 114 to 289 during the same period—*Statistical Abstract of India*, pp. 24-25.

2. Gilbert Slater: *Southern India*, p. 289.

3. Report on the progress of Agriculture in India during 1918-19.

4. Statistical Abstract of India (1912-13 to 1921-22), p. 418.

5. Gilbert Slater, *op. cit.*, p. 285.



India. The deficiency chiefly affected the wheat and gram crops. Wheat production in the country declined from 10 million to less than 7 million tons and the prices of wheat rose very high. The country imported 4,51,042 tons of grains in 1921-22 as against 2,287 tons in the previous year.

Barring unfavourable weather conditions during these 2 years, the harvests were on the whole favourable during the period under review and no part of the country was faced with any severe scarcity or famine. The area under cultivation, however, did not show any appreciable increase. The percentage of area devoted to the cultivation of foodgrains slightly declined and the area under non-food crops consequently increased.<sup>6</sup> There was particularly remarkable increase in case of groundnuts whose production more than trebled from 9,47,000 tons in 1914-15 to 33,30,000 tons in 1933-34. Similarly, the area under sugarcane also increased specially after 1930-31 on account of the grant of protection to sugar industry. The area under jute and cotton fluctuated with the price trends and declined considerably during the depression period.

Agriculture had a comparatively prosperous period after the First World War till 1928. After the monsoon failure of 1920, the harvests were on an average favourable. Prices received for the crops also remained very favourable till the onset of depression as would be clear from the following table:<sup>7</sup>—

<i>Year</i>	<i>Price of Delhi No. 1 Wheat at Bombay (per Cwt.) Rs. Paise</i>	<i>Cotton Broach Price at Bombay (per candy)</i>	<i>Price of Rice at Calcutta (per maund) Rs. Paise</i>	<i>Jute Price at Calcutta (per bale of 400 lbs.)</i>
1914	5.81	292	5.50	93
1918	6.91	594	5.12	53
1921	9.06	320	8.50	100
1925	8.25	459	8.75	89
1928	7.37	378	8.00	77
1932	4.75	199	3.87	38

NOTE :— Rupees annas pies have been converted into Rupees and paise.

Further, the prices of manufactured goods which had reached enormous heights during the First War period began to decline thereafter and in fact after 1920 there was much greater decline in the prices of manufactured goods than in the prices of agricultural commodities. This was for the benefit of our cultivators. Index numbers of export and import articles which stood at 281 and 280 in 1920 declined to 216 and 170 res-

6. Venkatsubbiah: *Structural Basis of Indian Economy*, Table II, p. 81. Four yearly average has been taken as the basis.

7. Figures adapted from Statistical Abstract of India.

pectively in 1929 registering a decline of about 25 per cent in the export articles and 40 per cent in the import articles. Our exports would have been still higher but for the fixation of exchange ratio @ 1sh. 6d. on the recommendation of Hilton Young Commission in place of 1sh. 4d. advocated by majority of Indian economists and businessmen. Subsequently, the prices of agricultural produce declined more than the prices of manufactured goods and the prices of export crops suffered to a much greater degree than the prices of other crops.

The commercialisation of agriculture proceeded a pace ahead during this period. There was a growing consciousness among the farmers to produce for the market and in many instances farmers began to produce superior grains for the market in place of inferior grains for self-consumption. The growth in the export of cotton, jute and groundnuts also indicates this tendency. The fluctuations in the acreage of cotton and jute in response to variations in market prices also point out that the farmer had become price conscious. Remarkable growth in the production of groundnuts in East Khandesh area in response to foreign demand and the increase in the acreage of sugarcane in U.P. and Bihar after the grant of protection to sugar industry also point in the same direction. In Bengal, cultivators would devote their lands to money crops even at the cost of their own food requirements. However, the pace of commercialisation of agriculture was not even throughout the country and it also depended upon the circumstances of the cultivator.

### Government Policies

Now we shall review the Government policies adopted for the benefit of agricultural sector of our economy. Before reviewing these policies, it may be pointed out that a fundamental change occurred in 1919. Under the reformed Constitution of 1919, agriculture, famine relief, cooperation and irrigation were inter alia made transferred subjects. Central Government concerned itself only with agricultural research and provision of finance for irrigation. Besides, it had certain powers of superintendence, co-ordination and direction in respect of transferred subjects<sup>8</sup> but was not allowed to spend any amount from Central revenues on provincial subjects. As finance was not under the control of popular ministries in provinces, they had little initiative to undertake bold scheme of agricultural improvements to put the agriculture on sound footing.<sup>9</sup> Government policy in the sphere of agriculture was mainly directed towards providing better irrigation facilities, and encouraging the growth of cooperative credit societies,

8. *India in 1923*, p. 53.

9. Nanavati and Anjaria: *The Indian Rural Problem*, II Edition, p. 86.

undertaking the reform of land tenures and helping farmers in achieving better yield from the crops with the aid of agricultural department.

### Irrigation

The area under canal irrigation showed a substantial increase of about 60 per cent. By 1933, about 30 million acres were brought under canal irrigation which was far larger than the irrigated area in any other country of the world. Even in the U.S.A. the area under canal irrigation was  $\frac{2}{3}$  that of India<sup>10</sup> But even with this achievement only 12.5 per cent of the cultivated area could be brought under State irrigation. Among the works completed during this period most important were Sukkar Barrage in Sind, Sutlej Valley Project in Punjab and Sarda Canal Project in U.P. and Cauvery Mettur Project in South India. A Central Board of Irrigation was established in 1926 for the coordination of work. In 1931 Central Bureau of Irrigation was established as an essential adjunct to the Central Board of Irrigation for coordinating research in irrigation matters throughout India and providing free exchange of information and experience on irrigation and allied subjects.<sup>11</sup>

The Government had incurred a capital expenditure of 146 crores and realised a return of 5.35 per cent on the capital invested. It was further estimated that value of crop raised on irrigated land amounted to Rs. 140 crores in 1924-25 but by 1933 the value came down to Rs. 128 crores on account of fall in prices.<sup>12</sup>

Progress in irrigation was, however, confined to large irrigation works and therefore benefit was confined mainly to Punjab, Madras, U.P. and Sind. Area under well irrigation instead of increasing declined during the period under review. Royal Commission on Agriculture had recommended that Government should provide expert advice and financial assistance<sup>13</sup> for extending well irrigation. In pursuance of this recommendation the Government did provide assistance on a limited scale for boring tube-wells but the work required far greater vigour on the part of the Government.

### Growth of Cooperative Movement

Under the Reforms, local governments were left free to adopt the 1912 Act to their own requirements but most of the local governments did not amend the Act. Bombay Government was the first to have separate Act in 1925 followed by Burma and Madras which also enforced separate Act in 1927 and 1932 respectively.<sup>14</sup>

10. *India* 1930-31, p. 228.

11. Triennial Review of Irrigation 1930-33.

12. All these figures have been taken from the Triennial Reviews of Irrigation published by the Government of India.

13. Summary Report of the Royal Commission of Agriculture, p. 39.

14. *Times of India Year Book* 1934-35, p. 396.

The cooperative movement made fair progress during the period under review. There was nine-fold increase in the number of societies<sup>15</sup> and the movement embraced a membership of 3 million. Assuming an average of 5 members in a family the movement benefited 15 million people in the country.<sup>16</sup> The progress of cooperative movement, however, was not even in all provinces and it was estimated by the Agricultural Commission that the movement covered 10 per cent of more families only in Coorg, Ajmer, Merwara, Punjab, Delhi and Bombay; while largest number of societies were incorporated in Bengal, Punjab, Madras, Bihar, U.P. and Bombay.

The movement received a severe set-back in 1931-32 due to general economic depression. The repaying capacity of the members had been severely affected by the steep fall in prices of agricultural produce. Overdues increased from 39 per cent in 1930-31 to 50 per cent in 1932-33. A special officer was appointed to effect speedy recovery of dues in Bombay.<sup>17</sup> In Madras more than 60 per cent of the short term loans fell in arrears and 1,134 societies were under liquidation in 1931-32.<sup>18</sup> A large number of societies had to be liquidated in all provinces and unsatisfactory membership had to be eliminated. There was a tendency among wealthy members to leave the societies for the fear of enforcement of the unlimited liability. Under such circumstances, the Government of India decided to convene an All-India Conference of Registrars of Co-operative Societies and other leading workers in 1933. The Conference recommended the Government to provide long term loan to cooperative societies and effect reduction in the rate of interest. Regarding the effect of cooperative credit movement on rural economy, Central Banking Enquiry Committee came to the conclusion that the 'rates of interest have come down wherever the cooperative credit movement has been successful; there is very little evidence about the reduction of total indebtedness through the agency of co-operative credit societies.'<sup>19</sup> The total working capital of the societies on 30th June, 1932 was a little more than Rs. 35 crores<sup>20</sup> while the rural indebtedness was estimated at Rs. 900 crores by the Central Banking Enquiry Committee. Similar view was also expressed by the Royal Agriculture Commission. The Government also admitted the failure of the movements

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15. *Ibid.*, p. 398.

16. Central Banking Enquiry Committee Report, p. 113.

17. Bombay Cooperative Review 1932-33.

18. Annual Report on the working of Cooperative Societies of Madras province for the year 1931-32.

19. P. 126 of the Report.

20. *Times of India Year Book*, p. 382.

to make progress to the desired extent.<sup>21</sup>

In brief, the cooperative movement could not make much headway because of the lack of suitable personnel to manage the societies, dishonesty of the members,<sup>22</sup> general illiteracy of masses, the absence of an efficient machinery to propagate the principles of cooperation and to assess the credit-worthiness of the peasants and to arrange for the prompt supply to the people.

Another weakness of the cooperative movement was its concentration on the credit side and less than 20 per cent societies were engaged in non-credit work. Royal Commission on Agriculture had emphasised the importance of the movement in relation to agricultural improvement to education and to irrigation and in fact anything which affects the cultivator.<sup>23</sup> Mysore Committee on Cooperation also expressed the similar view.<sup>24</sup>

### Land Legislation

The problem of securing fixity of tenure and ensuring of fair rent became more important because of the growing consciousness in peasants; though the change in policy was noticeable in the last quarter of the 19th century. The C.P. Government was the first to tackle this issue and passed C.P. Tenancy Act 1920, whereby every tenant became an occupancy tenant irrespective of the length of occupation. The newly created occupancy tenant had, however, no right of transfer except to co-sharer and to certain heirs. His land could not be sold in the execution of a decree except for the payment of the arrears of rent. The U.P. Government also passed the Agra Tenancy Act in 1926. The Act granted a statutory life tenancy to every tenant who was formerly classified as tenants-at-will. The

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21. "The expectation of the Sponsors of the Cooperative Movement in regard to what it can accomplish for short term credit and for intermediate credit and for long term credit has not been realised." —*Vide* Speech of G.S. Bajpai, Government member in Legislative Assembly on 6th April, 1934 reported in Volume IV of 1934.

22. In many cases, societies were established by unscrupulous members with the result that they monopolized the bulk of the loan and proved to be the worst defaulters. There were a few members who did not borrow and fewer still with an interest in the punctual repayment. Defaulters were not brought to the book since they were often the members of Committee. Interesting details are given in Review of Agricultural Operation 1929-30 and 1930-31—*Punjab Peasant in Prosperity and Debt*, p. 236, written by M.L. Darling.

23. Pp. 447-50 of the Report of the Royal Commission on Indian Agriculture contains exhaustive discussion.

24. Mysore Committee on Cooperation rightly observed: "the final solution of the problem of rural poverty lies in a material improvement of the economic position of the ryot population through steady pursuit of a policy aimed and directed at that end," p. 143 of the Report.

occupancy status could now be acquired by gift or purchase only.<sup>25</sup> Power of arbitrary enhancement of rent was further restricted and it was provided that rent could be enhanced only once in 20 years and the enhancement would not amount to more than 2 annas in a rupee which was further subject to roster limitation. Similar privileges were also extended to the tenants of Oudh by amending the Oudh Rent Act of 1886 in 1921 and 1926 subject to the exception that rent could be enhanced once in every ten years. One very objectionable feature of the Act however was that the landlord could acquire the land from the tenant for his own cultivation. That created uncertainty of tenure and affected cultivation. The grounds on which the rent could be enhanced were not also very clearly specified and proved to be the source of friction.

In Bengal, the 1928 Act limited the amount of fee payable to zamindar to 20 per cent of the purchase price subject to right of pre-emption of zamindar on the payment of 10 per cent excess sale price. The period of usufructuary mortgage was limited to 15 years only.<sup>26</sup> One very serious weakness of the Act was that Bargadars were not recognised as tenants or even as tenants-at-will though majority of them financed agricultural operations.<sup>27</sup> In fact many Bargadars were original tenants, who lost their right in Civil Court for failure to pay rent and other dues.

Legislation was also enacted in Punjab, U.P. and Bombay for restricting the transfer of land to non-agriculturists. The legislation did not succeed as there was no clear-cut definition of what constituted the agricultural classes to whom the transfer could be made. Money-lender-cum-landlord class hardly cultivated the land and sublet it to others.<sup>28</sup>

The position in the ryotwari areas was worse as there was no legislation whatsoever to protect the rights of the actual tiller who was not only rack-rented but also did not have any security of tenure.

Despite legislative enactments, the zamindars could continue to realise illegal cesses (awabs) from the tenants under various pretexts by 'overt intimations, false criminal prosecutions; fortuitous fires' or the threat of instituting suits for the arrears of rent.<sup>29</sup> In Oudh, the zamindars besides imposing illegal cesses could also compel the tenant to render free service

25. A commentary on the Agra Tenancy Act—Introduction by M.L. Agarwal.

26. Report of the Land Revenue Commission Bengal, p. 29.

27. *Ibid.*, p. 67.

28. Shri N.M. Joshi in his Speech in Legislative Assembly on 6th April, 1934 (reported in Vol. IV of 1934) had clearly pointed out how the Land Alienation Acts have not served the purpose for which they were meant. He has pointed out the various ways in which the provisions of these Acts have been evaded.

29. S.G. Panindikar: *The Wealth and Welfare of Bengal Delta*, pp. 191-94.

(Begar) for themselves. In Pratapgarh district such cesses amounted to 20 per cent of the recorded rentals. Thus the benefit of reduction in the incidence of revenue<sup>30</sup> did not reach the actual tiller of the soil and was appropriated mostly by intermediary class of rent receivers.

Due to increasing pressure of population and rising prices of agricultural produce, it had become profitable to sublet the land and live on such rental income. The practice of subletting had become quite common<sup>31</sup> and was increasing every year till the onset of depression. Except in U.P. and C.P., there were no stringent provisions to check the evil and even where the provisions existed they could be easily evaded as the tenants were changed at quick intervals. This phenomenon had serious repercussions both on the improvement of agriculture and economic position of the cultivators which in fact are inter-related. The economic status of the actual tiller was reduced and he did not have substantial margin left with him for effecting improvements in agriculture. Moreover he didn't also have the incentive to effect improvement on account of insecurity of tenure.<sup>32</sup> Thus, the productivity of the soil was adversely affected.

Thus the future problems in regard to Land Legislation were: (1) granting security of tenure to the actual tiller of the soil, (2) securing fair rents to the actual tiller by eliminating intermediaries or otherwise, (3) restrictions on the right of alienation of land. (4) Fixation of land ceiling to prevent the growth of intermediary class.

### Working of Agriculture Departments

Agriculture departments were doing useful work in providing seeds of improved variety specially in case of cotton, wheat, sugarcane, groundnut and rice.<sup>33</sup> In 1929-30 the area under improved strains amounted to

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30. In Punjab the Quinquennial Report ending 1927 showed that 40 per cent tenants were tenants-at-will. In Madras its incidence was also quite heavy, the indirect evidence of which is provided by the substantial percentage of landless labour in villages which was as high as 44 per cent. In Bengal there was an increase of 62 per cent in the number of rent receivers between 1921-31 (all this information has been collected from Volume II of Land Revenue Commission Report, Bengal).

31. In U.P. the occupancy tenants could sublet the land for five years and the statutory tenants for 3 years and gap between 2 sub leases was restricted to 5 and 3 years respectively. C.P. Tenancy Act gave power to revenue officers to confer occupancy status on sub-tenants in case the occupancy tenant was found to be a habitual sub-letter.

32. Regarding the Barga system of Bengal it was pointed out by S.G. Panindikar in his book 'The Wealth and Welfare of Bengal Delta' that Barga land was cultivated in a careless and slovenly manner with the result that crops on such lands were almost invariably much poorer in quality and quantity which was not even 2/3rds of the value of yield on similar land cultivated by the tenant.

33. Review of Agricultural Operations in India 1933.

13.7 million acres<sup>34</sup> but the amount of seeds distributed through departmental organisation was not commensurate with the requirements. For example in 1930-31 only 6,86,195 cwts. of seeds were distributed through the departmental organisation.<sup>35</sup> Royal Agricultural Commission 1928, therefore, rightly stressed the need for much greater work in this direction and recommended the distribution of seeds through cooperative organisations.<sup>36</sup> Regarding the work in the field of agricultural engineering, the Commission was of the view that this section should be completely reorganised because of its poor performance in the past. Similarly, the Commission deplorably pointed out that agricultural experts of the department are even yet not in a position to give satisfactory advice to the cultivators in regard to the use of manures.<sup>37</sup> In respect of agricultural research it was the considered opinion of this expert body that it is still in its infancy. And the claims of research have received only half-hearted recognition. The Commission, therefore, recommended the establishment of an Imperial Council of Agricultural Research to promote, guide and co-ordinate agricultural research throughout India. The Government of India accepted this recommendation and constituted the Council in 1929. The Council was provided with inadequate funds from the beginning and its grants were further reduced during retrenchment campaign of 1931.

Total expenditure on agricultural departments in different provinces and the Central Government expenditure on Imperial Council of Agricultural Research amounted to Rs. 148 lakhs which was further reduced to Rs. 114 lakhs during depression. Thus, the Government did not spend even half per cent of the total expenditure of Central and Provincial Governments on agriculture which supported nearly 3/4ths of the population. This shows the callous indifference of Government for promoting better agriculture, though Government was never tired of acclaiming the lot of work it was doing for the improvement of agriculture. Naturally, the overall impact of Governmental activities on the improvement of productivity in agriculture was rather disappointing and did not result in any improvement whatsoever.<sup>38</sup> Royal Agricultural Commission also held a similar view. In fact, the Government lacked proper liaison with the farmers and did not have sufficient number of demonstration farms which were so essential in a country like India where illiteracy was so widespread.

A word may not be out of place about the activities of Indian Central Cotton Committee which was incorporated in 1923 on the recommendation

34. *India* 1930-31, p. 170.

35. Review of Agricultural Operation in India 1933.

36. Report of the Commission, p. 96.

37. *Ibid.*, p. 81.

38. Venkatsubbiah, *op. cit.*, p. 86.



of the Indian Cotton Committee of 1917-18. The Committee worked in the direction of improving the quality of cotton and adoption of better marketing practices. Since its inception up to 1933, the Committee spent a sum of Rs. 77 lakhs on the improvement and development of cotton growing and marketing. As a result of its activities useful work was done for the prevention of cotton plant diseases and more area was devoted to improved varieties of staple cotton. The Agricultural Commission commended its useful work and recommended for the constitution of Central Jute Committee on similar pattern. This recommendation was accepted by the Government and a Committee was constituted for jute as well.<sup>39</sup>

### Appointment of Royal Agriculture Commission

There was an insistent public demand in the country for improving the productivity of the soil and for giving a better deal to the tiller of the soil. As agriculture was the most important occupation, the prosperity of the country depended on prosperous agriculture and contented peasantry.<sup>40</sup> Even during the period of 1921-28 when prices were rising and agriculture was in a comparatively good stage 55 per cent of the population was living on insufficient food getting only about 73 per cent of the minimum requirements for maintaining efficiency. Mr. Armond Tuplon also admitted that there were 50 million people in India who never had one full meal in the whole year. The main reason for such a state of affairs was the increasing pressure of population on the soil because of the failure of the Government to industrialise the country by which the surplus population could be withdrawn from agriculture. There was an increase of 10.6 per cent in the population between 1921-31 and this increase in population further exerted more pressure on agriculture.<sup>41</sup>

It was, therefore, felt that a Royal Commission would be able to bring out on surface the true nature of the circumstances which are inhibiting the revitalising process in rural India and would therefore pave the way for necessary social and legislative reforms.

The Government of India at last acceded to the public demand and appointed a Royal Commission on Agriculture in 1926 under the chairmanship of Lord Linlithgo to make recommendations for the improvement of agriculture and the promotion of the welfare and prosperity of the rural population.<sup>42</sup> For the first time a commission was appointed in the country to suggest measures to put the agriculture on sound footing. Up till

39. *India* 1933-34, p. 84.

40. D.S. Dubey quoted by Gangunlle (N.N. in his paper read before the East India Association in 1925 printed in *problem of Rural India* by N.N. Gangunlle).

41. In discussion of the above paper.

42. *Ivide* Report of the Commission.

now Government had framed its agriculture policy on the recommendations of various Famine Commissions. The whole problem of land revenue and land tenure was however excluded from the purview of the Commission and this fact considerably diminished the value of the report. The welfare of rural masses could not be fully considered without giving adequate attention to the land systems prevalent in the country.

The Commission undertook an extensive tour of the country and recorded evidence running into several volumes from all parts of the country representing all sections of the public opinion and submitted its report in 1928. The Commission made a comprehensive investigation of the various problems that hindered the progress of agriculture and made many useful recommendations for increasing the efficiency of agriculture. At the same time the Commission also emphasised the need of broadening the outlook of the tiller of the soil and responsibility for initiating the steps required for improving agriculture was laid on the Government.

Government of India convened a Conference at Simla in the first week of October 1928 to consider and implement the various recommendations of the Commission. Government found it difficult to implement immediately all the recommendations of the Commission on account of their financial implications. The report was, however, accepted as a basis on which rural reconstruction of agriculture was to proceed in future. The provincial governments agreed to the progressive implementation of the recommendations as and when their circumstances permitted. The Commission's proposal for reorganising services engaged in agriculture and veterinary fields was not, however, found acceptable. The only immediate outcome of recommendations was the setting up of Imperial Council of Agricultural Research in 1929 in a somewhat modified form. I.C.A.R. was granted very limited financial assistance and therefore could not commence operations on the desired scale. As in the past, Government was not prepared to devote sufficient finance for improving agriculture in the country.

### Depression

The Depression which began in 1929 lasted up to 1932 and thereafter signs of recovery became apparent. The origin of the crisis<sup>43</sup> of 1929 may be traced to the maladjustment in the demand and supply of agricultural and industrial production. A close analysis of the tendencies of supply and demand showed that the underlying forces were making for overproduction which was partly due to favourable prices of agricultural produce and raw materials prevalent during the post-war boom (1920-24). The output of wheat and other agricultural commodities also increased due to the application of science which not only helped in increasing productivity

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43. The information is based on the League of Nations Publication 'Courses and Phases of Depression'.

per acre but also in extending cultivation to new areas.<sup>44</sup> On the other hand, the rise in the standard of living in advanced countries of Europe and America led to an increased demand for finer varieties of goods and for services rather than for greater quantities. While in India, the technological developments in the field of agriculture were not applied with the result that the productivity of agriculture did not increase. When reaction came after the boom it coincided with the downward swing of the business cycle.<sup>45</sup> India was affected by the trend of world prices though there was no over-production in the country. Ever since the development of the means of transport and communication, the course of Indian prices has not so much been influenced by internal conditions of demand and supply as by the external forces affecting the price level. It is also suggested that this crisis was aggravated in India by the deflationary policy followed by the Government for maintaining the exchange ratio at 1s. 6d. as recommended by Hilton Young Commission.

There was a catastrophic fall of about 50 per cent in the prices of agricultural commodities which would be clear from the following index:<sup>46</sup>

**Price Index of Agricultural Commodities**  
**Base Year 1928-29**

Year	1928	1929	1930	1931	1932	1933	1934	1935
Index No.	100	95	73	53	50	48	49	53

According to an estimate in the Review of Trade of India, the value of principal crops in British India declined from Rs. 1,021 crores in 1928-29 to Rs. 474 crores in 1933-34 indicating a fall of 53.6 per cent. Not only the prices fell but the quantum of exports also decreased. Between 1929-30 and 1932-33 the export of cotton decreased from 4.07 million bales to 2.6 million bales while export of raw jute declined from 4.45 million bales to 3.57 million bales.

Sufficient data are not available to indicate the effect of depression on the farmers in different parts of India. But it is certain that the worst sufferers were the cultivators of Bengal, C.P. and Madras who specialised in the production of raw materials like jute, cotton and oilseeds for ex-

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44. Due to application of science in the field of agriculture better varieties of seeds were evolved and chemical fertilizers were applied to the land leading to enhancement in production. Introduction of new types of seeds which took 100 days instead of 130 days to mature and new drought resisting strains led to the extension of area under cultivation because those areas which were formerly unfit for cultivation could now be brought under plough.

45. Article of S.N. Sen on Depression in Modern Economic Problem of India edited by R.K. Mukherjee.

46. Lakshmi Narain: *Price Movement in India*, p. 22.

port.<sup>47</sup> The Bengal farmer, in fact, grew so much jute that he did not produce enough rice for self-consumption.

Farm Accounts in the Punjab give us an idea of the extent of loss suffered by the farmers. The average net income of the farmers who had own land declined from Rs. 32 As. 8 Pies 4 (or Rs. 32.52) per acre in 1928-29 to Rs. 7 As. 14 Pies 7 per acre in 1930-31. This was the condition of those farmers who owned irrigated lands in prosperous districts but conditions of peasants owning Barani land (dependent on rain) was not so well off. Far worse, however, was the condition of tenants who cultivated lands under Batai system or paid cash rent to landlord. Two out of three such tenants could not realise even their cash expenditure and thus worked for the whole year without receiving any remuneration for their labour. The average net income per man per day of 39 tenants who cultivated on Government farm was about 9 annas in 1928-29, about 6 annas in 1929-30 and 9 pies in 1930-31.<sup>48</sup> When this was the condition of Punjab farmers, the condition of the farmers of other provinces can better be imagined than described. It is certain that during this period of depression the world was fed below cost of production.

To the extent to which the agriculturist consumed his own produce and paid for other customary services in kind, the fall in prices did not affect him adversely. But a considerable portion of the produce had to be sold for the purchase of commodities as also for the payment of fixed dues such as interest, taxes and loan.<sup>49</sup> The farmer tried to increase production by working hard but even this increased production did not fetch more money. Agriculture became an unprofitable proposition. Firstly, while the prices of agriculture produce declined by about 50 per cent while the expenses of cultivation decreased by about 15 per cent to 20 per cent. Secondly, the fall in the prices of manufactured goods was much less than the fall in the prices of agriculture produce and, therefore, he had to sell more in order to purchase same amount of goods.<sup>50</sup> Thirdly,

47. Index of Agricultural Income derived from the article of S.N. Sen already quoted:

Year	Bengal	Bombay	C.P.	Madras	Punjab	U.P.
1929	100	100	100	100	100	100
1933	39	69	49	55	75	78

48. All this information is derived from the article of Brij Narain 'Peasant' contributed to 'India Analysed', Volume II.

49. Vide speech of Shri Sita Kant Mahapatra in Legislative Assembly on 6th April, 1934 reported in Vol. IV of 1934.

50. Though all the world over there was correspondingly less fall in the prices of manufactured goods in comparison to agricultural produce but in India this disparity was still greater as India was following a protectionist policy as the cost of Indian manufactured goods was much higher than the cost of imported goods of the same quantity.

the remission of taxes was on a very moderate scale. Except in U.P. and Punjab where remissions were on a little liberal scale,<sup>51</sup> other provincial governments tried to collect the same amount of revenue and on the whole revenue demand of the Government was 6 per cent less in 1933-34 than in 1931-32.<sup>52</sup> Fourthly, there was no reduction in interest charges and in the payment of principal<sup>53</sup> and interest and the real burden of these fixed obligations became very onerous on him. Further, additional loans for meeting this calamity could be raised only on ruinous rate of interest.<sup>54</sup>

He had to pledge the jewels to find money for paying Government kist and meeting his other requirements. These jewels were subsequently sold for non-payment and this distress gold was responsible for such enormously large exports of gold.<sup>55</sup> It was no wonder, under the circumstances, that he was unable to pay the dues of his cooperative societies in time. In fact, he had to borrow more for meeting his current requirements and therefore, rural indebtedness increased from Rs. 900 crores (as estimated by the Central Banking Enquiry Committee) to Rs. 1,800 crores (as estimated by Reserve Bank of India). Thus, the poor farmer suffered terribly for no fault of his own. Acute poverty, loss of land, and social status were his lot.

### Government Measures to Combat Depression

Unlike the Government of foreign countries, our Government did pretty little to combat the effect of depression and in the main left the farmer all alone in such a calamity. The Government did not realise the gravity of the situation fully and did too little and too late to help the farmers. The Government of countries like Australia, Canada, Argentina and the U.S.A. where agriculture was important did take effective steps to raise the prices of agriculture produce by restricting production, encouraging exports through bilateral agreements or currency depreciation or by purchasing surplus produce from the market. We shall discuss in Chapter V about the various measures taken by the Government to alleviate

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51. In U.P. in 1931-32 out of a total land revenue demand of 7.27 crores Government remitted a sum of Rs. 46.73 lakhs in 1932-33 out of a total land revenue demand of Rs. 7.49 crores, Government remitted Rs. 1.4 crores. In Punjab in 1932-33 out of a total revenue payment of Rs. 4.49 crores Government remitted a sum of Rs. 46.73 lakhs. In 1931-32 out of a total land revenue demand of Rs. 4.16 crores Government remitted a sum of Rs. 1.15 crores. *Vide* IV of 1934.

52. Speech of Kunwar Raghbir Singh on 6th April, 1934.

53. Though Debt Legislation was undertaken in almost all provinces but the immediate relief was available hardly in few provinces.

54. *Vide* speech of Sita Kant Mahapatra already quoted.

55. Speech of K.P. Thompson (Malabar) in Legislative Assembly on 6th April, 1934.

the suffering of rural masses as most of the steps were taken only when the popular ministries came into power in the provinces.

### Conclusion

During the period under review the population of the country increased from 315 million in 1911 to 352 million in 1931. There was only 1.2 per cent increase in the decade ending 1921 on account of the influenza epidemic that raged the country in 1918 and took a very heavy toll of life; but in the decade ending 1931 there was a remarkable increase of 10.6 per cent in the population. There was also not much change in the urbanisation trends and according to 1931 census only 11 per cent people were residing in towns and cities.<sup>50</sup>

Unlike many other countries (e.g., Hungary, Yugoslavia, Finland, Japan) India could not shift her population from agricultural to non-agricultural occupations. In fact, the pressure on agriculture increased<sup>51</sup> as there was much greater decline in the income of the craft workers in the countryside.<sup>52</sup> The apparent decrease revealed by the 1931 Census figures is due to the change in the method of calculation.<sup>53</sup> Efforts were made to bring more land under plough but the newly reclaimed area was not equally fertile and produced low economic returns.<sup>54</sup> In the absence of adequate availability of land, per capita availability of land decreased from 1.9 acres to 1.04 acres between 1911 and 1931.<sup>55</sup> Various provincial inquiry Committees and surveys made revealed that a large number of persons were holding uneconomic or undersized holdings. U.P. Banking Inquiry Committee, for example, found out that 56 per cent of the cultivators possessed holdings which were below the economic area.<sup>56</sup> The average size of the holding was much less as compared to the other countries which is clear from the following table:<sup>57</sup>

56. All the above figures have been taken from 1931 Census Report—Volume I specially pp. 5 and 46.

57. In a sample study made by 1931 Census Authorities, it was found that in the 31 non-agricultural cast under survey 36 per cent still followed the traditional occupation and 64 per cent abandoned it; of whom 49 per cent took to agriculture and the remaining 15 per cent were engaged in other occupations.

58. Colin Clark: *The Conditions of Economic Progress*, p. 453.

59. The apparent decrease in the number of people dependent on agriculture was due to the method adopted by the Commission since women of agriculturists were counted as domestic workers. This fact has been admitted in the Report and thus there is no decrease in the percentage of people dependent on agriculture.

60. 1931 Census Report, p. 289.

61. Census of India 1951, Vol. I, Part I-A, p. 141.

62. U.P. Banking Inquiry Committee, p. 218.

63. Panindikar, *op. cit.*, p. 98.

<i>Name of the Country</i>	<i>Size of the holding</i>
India	4.5 acres
Germany	19.25 „
Denmark	35.58 „
England	26.95 „
Wales	38.05 „
France	15.05 „
Belgium	5.7 „

In spite of the fact that agriculture was not a profitable occupation, people stuck to it in the absence of alternative occupations. In normal years, farmer could eke out enough for his subsistence but whenever the crop failed or the prices realised became low, he had to borrow to maintain himself in the hope of repaying the debt at some favourable time. In most cases, however, he was unable to redeem the debt and was compelled to satisfy the debt by the sale of land to the moneylender or cultivated it on crop sharing basis. Thus there was simultaneously growing concentration of land in hands of moneylender-cum-landowning classes and increase in the landless labour in the country. For example, in U.P. out of 12½ lakh revenue payers, 8,000 occupied ¼ of the land.

Agricultural productivity also remained more or less stagnant and did not grow with the increase in population. There were several reasons for such a state of affairs. A substantial portion of the land in villages owned by the absentee-owners was cultivated on crop-sharing basis or with the help of hired labour. The crop sharer did not have any incentive to effect improvement in such land as he was liable to be changed any time. Cultivators working on uneconomic holdings did not have adequate funds for raising the productivity of the land. The substantial land owners of the upper classes did not cultivate the land themselves but lived on the income earned by letting the land either on cash rental or batai basis.<sup>64</sup> The elite of the countryside did not take much interest in the proper cultivation of the land. In fact, in several parts of the country, it was considered derogatory to cultivate the land personally.<sup>65</sup> They lacked the habit of hard work which alone could produce better results. Like England, the landlord and the actual tiller did not cooperate to raise the productivity of the land. In fact, villages in the country were lacking the proper type of leadership which is so essential for effecting improvement.

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64. According to the observations of Land Revenue Commission, Bengal, the pattadar in Madras could realise 5 times more from his subtenants than his assessment. *Vide* Volume II of the Appendices, p. 29.

65. R.K. Mukherjee, *op. cit.*, p. 125.

The factors that retarded improvement in agriculture can be summarised as follows:—

- (a) Defective land tenures.
- (b) Lack of capital.
- (c) Ignorance and lack of initiative on the part of cultivator.
- (d) Uneconomic holdings.
- (e) Instability of price.
- (f) Absence of improvement in the quality of the produce.

In fine, until the end of the 19th century a very great problem that faced the Government of India was the frequent occurrence of famines which had crippling effect on economic progress and prosperity. Government succeeded in solving this problem mainly by the spread of railways and the provision of irrigation facilities on a large scale. But after 1921 the main problem was the pressure of increasing population on agriculture on account of which rents of agricultural lands began to rise and the zamindars found it to their advantage to sublet the land and live on rental income. The Government tried to solve these problems of rise in rents and transfer of tenancy by restricting the enhancement of rents and by increasing the security of tenure. These measures did not succeed because the real remedy was the diversification of occupational structure through industrialisation for which the Government did nothing substantial beyond paying a lip service.



## CHAPTER IV

# INDUSTRIAL DEVELOPMENT

(1931—1947)

In Chapter II we had pointed out that despite keen desire, industrialisation could not make much headway. The abnormal conditions in international trade, exchange depreciation, dumping and the severe agricultural depression in the face of none-too-sympathetic attitude of the Government retarded the growth of industries to the desired extent. In this chapter we propose to review the growth of industries from 1934 till the country became independent.

Depression which engulfed the world in 1929 had run its course by 1933 or so. The prices and production thereafter began to show upward trend on account of the various measures taken by the governments of industrial countries and the restrictive policies adopted by the industry for the regulation of the output. Increased expenditure on armament in Europe imparted further stimulus. The impact of these world factors was also reflected back on our economy. Indian industry also reorganised and adapted itself to the new changing circumstances. Besides Swadeshi Movement also helped to displace the imports of consumer goods in the home market and helped the industrial revival. The increasing consumption of coal indicates the revival of industrial activity. As against a consumption of 19.4 million tons in 1932-33, the total consumption amounted to 27 million tons in 1937-38. Increase in the number of company registrations further corroborates the same trend.<sup>1</sup>

On the eve of Second World War the country had reached a stage of self-sufficiency in regard to sugar, matches and cement; while in case of steel more than 2/3rds of the demand could be met from indigenous production. As regards cotton textiles, the country could produce more than 90 per cent of its requirements and only 650 million yards of cloth consisting of finer varieties was imported in 1939 mainly from Japan and England. In protected varieties of paper, the indigenous production amounted to 3/4ths

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1. In 1932 there were 7,997 companies with a paid up capital of Rs. 285.9 crores but by 1937 the number of companies had increased to 11,299 having a capital of Rs. 311.5 crores. In fact, the increase was much greater as the 1932 figures include companies registered in Burma.

of our requirements but the imports in 1937-38 amounted to 1,82,000 tonnes consisting of newsprints, packing and old newspapers, etc. There was also substantial progress in the production of jute, tea and pig iron and their exports showed considerable increase. Leaving aside jute, cement, pig iron and glass industries, most of the industries were developed under the protective umbrella. The growth of the important protected industries since the grant of protection can be judged from the following table:—

**Table showing the Average Production Before and After the Grant of Protection<sup>2</sup>**

<i>Name of Industry</i>	<i>Pre-protection</i>	<i>Pre-war</i>
Iron & Steel —		
Finished Steel	100	445
Cotton Textiles :		
Yarn	100	161
Cotton Piecegoods	100	167
Paper and Paste Board	100	300
Matches	100	206
Magnesium Chloride	100	250
Cane Sugar	100	589

The greatest rate of growth was achieved by sugar and steel industries as they had small base in the pre-protection period while comparatively small rate of growth of cotton industry was due to the fact that it had a big base and protection was mainly needed to negative the effects of dumping and currency depreciation.

Despite the growth of large scale manufacturing industries, there was not very significant change in the proportion of labour employed and proportion of National Income contributed by this sector. Thus according to Rosen, the net effect was that the 'factory industry as a whole was relatively static in terms of its contribution to National income.<sup>3</sup> Industrialisation did not have any significant impact on the whole country and nearly 3/4ths of the total labour employed in factory industries was employed in Madras, Bombay and Bengal provinces.<sup>4</sup>

2. Report of the Fiscal Commission 1949, p. 80.

3. Rosen: *Industrial Change in India*, p. 3.

4. Percentage of labour employed in different provinces in 1939 in factory industries:—

<i>Provinces</i>	<i>Percentage</i>
Madras	11.3
Bombay	26.6
Bengal	32.7
U.P.	9.1
Punjab	4.5
Bihar	5.5
C.P.	3.7

Unfortunately the protective policy adopted by the Government 'proved ineffective, tardy and hardly adequate to meet the requirements of an under-developed country like India'.<sup>5</sup> Protection was not visualised as an instrument of general economic development but was viewed as a means of enabling particular industries to withstand foreign competition.<sup>6</sup> The piecemeal handling of and negative attitude towards protective tariff was responsible for slackness in the provision of the supplementary measures recommended by the Fiscal Commission 1922. The Government also did not take positive measure to see that the protected industries were working with efficiency.<sup>7</sup>

In fact, even before the World War II, the Congress Party, which assumed power in several provinces under the 1935 Constitution, had felt the need for a planned all-round development of the country and had appointed National Planning Committee in 1938 under the Chairmanship of Pandit Jawaharlal Nehru. Twenty-nine Sub-Committees were appointed to examine the various aspects of the economy. The work could not, however, progress on account of War time developments and the reports of the various sub-committees were published in 1947.<sup>8</sup>

Thus it was the view of the Fiscal Commission 1949 'that if world factors had been more favourable and the policy of protection more broadly conceived and liberally implemented in a Constitutional atmosphere more in harmony with national aspirations, the gaps in India's industrial set up would have been perhaps fewer.'<sup>9</sup>

### Effect of Second World War

Industrial economy of the country in the beginning of the Second World War was in much better state as compared to the First World War. Industrial development during the inter-war period had reached a point where most of the important consumer goods could be manufactured within the country. It may, however, be pointed out that this type of stabilisation of production and consumption was established at very low levels of standards of consumption as the purchasing power of the masses was very low.

War came as a boon to industries as the effects of world recession after the boom of 1937 were being felt and stocks were accumulating. Stoppage of imports as also the increasing demand for military and civilian needs

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5. Evidence of Hindustan Chambers of Commerce before Fiscal Commission *vide* Volume II, p. 232.

6. Report of the Fiscal Commission 1949, p. 49.

7. Evidence of Khoj Parishad Calcutta before Fiscal Commission 1949 given in Volume III.

8. K.T. Shah: Preface of N.P.C. Report.

9. Report of the Fiscal Commission, p. 85.

led to sky rocketing of prices. Government purchases varied from 25 per cent in case of textile output to more than 80 per cent in respect of cement production.<sup>10</sup> Again there was unique opportunity to expand production and earn bumper profits. From 1939 onwards production began to increase under the influence of war time conditions and the index of production reached its peak level (base year 1937=100) at 120.1 in 1945. Higher rate of growth was attained by paper, cement, steel and chemical industries while cotton textiles, sugar and coal recorded satisfactory rate of increase. Many items of engineering goods and chemicals, hitherto imported, were successfully manufactured in the country for the first time. Recommendations of Chetfield Commission and Roger Mission were implemented to increase production in Government Ordnance factories.

The following table gives the trend of industrial production:<sup>11</sup>

Index of Industrial Production

Base year 1937=100

Year	Cotton	Jute	Steel	Chemicals	Paper	Cement	Matches	Sugar	Coal	General
1938	109	98.3	108	84.4	121.6	124.8	85.1	88.7	113.1	105.4
1939	104.3	92.4	125	103.9	135.1	152.9	87	62.5	110.5	102.7
1941	114.8	92.4	131.1	153.2	185.4	185.8	76.4	108.2	116.5	117.8
1943	117	84.4	141.5	138.6	179.2	188.4	68.8	95.3	101.9	117
1945	120	84.4	142.9	126.3	196.5	196.5	90.2	85.5	116.4	120.1
1946	101.9	84.6	130	134.1	193.4	181.1	90.5	80.5	118	109
1947	95.8	79.5	121.8	111.2	143.7	158.5	77.6	73.8	121.8	102.4

A perusal of the above table shows that there was slight decline in production in 1939 as compared to 1938 on account of the effects of world recession. From 1939 onwards production began to increase under the influence of war time conditions and reached the peak level of 120.1 in 1945 and thereafter there was again decline.

The industry exploited the consumer mercilessly by charging exorbitant prices as the imports were drastically curtailed. Public which supported the industries in pre-war period by paying higher prices for indigenous

10. Rosen, *op. cit.*, p. 3.

11. Evidence of Indian Chambers of Commerce before Fiscal Commission 1949—reported in Volume II.

production under the spirit of Swadeshi Movement got a raw deal at the hands of our industrialists. Naturally the image of business was lowered in the eyes of the public and there was persistent public demand for state intervention to control prices and regulate production so as to save the poor consumer from the clutches of profiteers.

Under the pressure of public demand and the economic situation prevailing in the country the Government was at last compelled to introduce detailed controls in 1943. Though the Government of India had assumed vast powers under the Defence of India Act 1939 for controlling supplies and services essential to the life of the community; but before 1943 had used its powers mainly for regulating the exports and imports. It was only in 1943 when the economic situation became critical that the Government set up in April 1943 a new Department of Industries and Civil Supplies at the Centre. Steps were taken to regulate production quantitatively and qualitatively; the limited supplies of essential goods like cloth, kerosene, sugar, etc., were rationed. Industrial growth was directed into the desired channels by instituting control on Capital Issues.<sup>12</sup> Apart from the fact that controls were introduced at a very late stage, they were the product of much less deliberations than controls in other countries. Government did not utilise fully the experience of European countries in evolving controls.<sup>13</sup> Further, these controls were not properly co-ordinated and integrated.

Disproportionate increase in demand in relation to supply gave our industrialists an opportunity to earn bumper profits. In the absence of any control on prices up to 1943 the industry enjoyed an era of high prosperity. Even after the introduction of control, profits remained quite substantial as is indicated by the table given below:

Index No. of Industrial Profits<sup>14</sup>

Base Year 1928=100

Year	Coal	Jute	Cotton	Tea	Sugar	Paper	Iron & Steel	All Industries
1939	139.1	13.6	154.5	96.2	179.4	151.8	289.3	72.4
1940	140.2	48.8	220.1	95.4	180.0	358.7	300.7	99.9
1941	114.9	46.8	489.1	141.3	247.3	432.2	387.3	135.4
1943	133.1	37.5	988.9	137.0	283.2	535.8	323.9	170.9
1945	359.7	44.5	654.1	14.5	195.6	424.6	348.5	163.2
1946	276.5	56.4	631.9	191.5	219.2	405.3	293.7	160.2

12. N.P.C. Sub-committee Report on Manufacturing Industries, p. 121.

13. War Time Control and Peace Time Ends—An Article of D.R. Gadgil.

14. Statistical Abstract of India, 1949, p. 1520.

A perusal of the above table shows that record profits were earned by almost all industries except in case of jute industry which did not attain the level of pre-depression profits. Highest rate of profit was earned by cotton textile industry followed by paper and iron and steel industries.

There was not very significant increase in production capacity of the industries and increased output was obtained mainly by the greater utilisation of the existing equipment. Machinery and equipment were soon worn out because of excessive use and since it was difficult to replace worn out machinery during the war, there was decline in production after some time. Even established industries found it difficult to maintain production as the supplies of basic stores and equipment were affected during the war. Even the Government assurance in 1940 of according favourable treatment in the post-war period to industries started during the war time did not bring about any appreciable change in the industrial growth.

As compared to India, production increased at a much faster rate<sup>15</sup> in U.S.A., Canada and England. U.S.A. was able to more than double its production within a period of 4 years while very significant advance was made by Canada and United Kingdom. There was clearly no overall mobilisation for war efforts as the gravity of the situation was not fully realised in the initial years. At least up to 1942, despite shortage of tonnage, it was possible to import machinery and machine parts from U.S.A. for increasing the production base in the country. The industry was not allowed to stockpile the essential materials, stores and equipment. The Government was also rather hesitant to develop industries which might later on compete with the British industry. Another reason for the slow growth of our industry was that the country did not have a balanced industrial structure. Basic and key industries were not developed during the inter-war period despite the recommendations of Industrial Commission to develop these industries. The country had no capital goods industry at all while its engineering industries were more or less in a rudimentary stage.<sup>16</sup> Absence of chemical industries also revealed the precarious nature of country's dependence on such supplies from abroad.

#### 15. Indices of Industrial Production:

For U.S.A., Canada and India the base year is 1937 while for the U.K. the base year is 1938.

Year	U.S.A.	Canada	U.K.	India
1939	96	101	108	102.7
1943	212	184	175	117.8
1944	208	184	179	117.0
1945	180	163	178	120.1

SOURCE : *Eastern Economist*—February 13, 1948. Production Trend during and after the War by K.N.D.

16. Evidence of Hindustan Chambers of Commerce before Fiscal Commission 1949 reported in Volume II, p. 232.

It may also be pointed out that an increase of about 20 per cent in production during the Second World War was achieved at a lower level of efficiency due to deterioration of equipment, continuance of extra marginal firms in production, decreasing labour efficiency<sup>17</sup> and the lack of vigilance on the part of the management as a result of high war time profits. One may, therefore, learn from this experience that higher rate of profit is not necessarily conducive to the efficiency and the growth of the industry.

As happened during the First World War, there was no attempt to conserve adequate profits for modernisation and expansion. Even dependence on bank borrowings was not reduced to any marked degree. Had adequate profits been retained, the process of rationalisation would have been very much facilitated during the post war period. This is specially true of textiles and sugar industries which have a large number of sick units.

The progress recorded during the war years had been almost in the direction of consumer goods industries to a striking neglect of production of capital goods industries and war failed to bring about the much needed balance in our economy.<sup>18</sup> Fiscal Commission (1949) also admitted that 'in spite of the advance made in some lines of manufacture, the deficiencies in the different sectors of our economy still remain considerable'.<sup>19</sup> There was, thus, inadequate and lop-sided development during the war period but the public opinion became strong in favour of industrialisation of the country and wanted the Government to take active steps to this end.

### Government Policy

A more important effect of the II World War was the realisation on the part of the Government that there was paramount need for industrialising the country. The Government realised that policies adopted so far were not conducive for the development and needs must be changed. The responsibility of initiating development could not be entirely left to the provincial governments and central control and initiative were essential if the country was to achieve industrialisation at a rapid pace and assume its due place in the comity of the nations.

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17. The following table gives productivity per worker in different industries at the beginning of the World War II and in 1946:—

<i>Industry</i>	1939	1946
Coal	10.19 tons	6.87 tons
Cotton	702 yards	531 yards
Output TISCO	16.24 tons	13.25 tons

The above Table has been taken from the evidence of Indian Merchants Chambers of Commerce submitted to Fiscal Commission.

18. Evidence of Indian Chambers of Commerce before Fiscal Commission 1949—reported in Volume II.

19. Report of the Fiscal Commission, p. 44.

The Government had now acceded to the public demand for planned industrial development and created at the Centre a new Department of Planning and Development. In fact, even before this Department was set up, the various Departments of Central Government had begun formulating plans to meet the situation during the Post-War period. The newly created Department began its work in right earnest and appointed 29 panels for different industries. These panels were required to submit production plans in regard to the industries interested for the next five years and recommend various measures by which the proposed targets could be fulfilled.

On 21st April, 1945, the Government issued a statement outlining the policy for the future industrialisation of the country. The industrial policy, though it did not fully meet the national aspiration,<sup>20</sup> was a marked departure from the previous attitude of the Government. The main objectives of the policy were to increase the national wealth by the maximum exploitation of the country's resources and to provide a high and stable level of employment in industries. The Government agreed to develop essential industries like iron and steel, chemicals and dyes, transport industries, machine tools, etc., etc., if adequate private capital was not forthcoming for their development. For regulating the growth of industries in accordance with the desired objectives, Government proposed to license industrial undertakings. For securing coordinated and planned development, central control was visualised for almost all the organised industries. An assurance, however, was given that Government would impose minimum controls required for balanced growth of industries, checking excessive profits, concentration of capital, ensuring quality of products and fair wages to the labourers. Besides, the Government accepted its full responsibility for developing the infrastructure of the industry to facilitate the growth of industries. Such pre-requisites were transport facilities, power, survey of mineral resources, scientific and industrial research and technical education. Government help was also to be given for procuring capital goods, and technical experts. The Government also proposed to create investment corporation for providing financial assistance to industries.

Thus the need for planned industrial development in which state would give all facilities to the private sector and at the same time initiate development of essential industries where private capital would not take interest was fully accepted and proposed to be implemented. However, as yet the need for an all-round, comprehensive and coordinated development of the country's resources was not accepted.

In keeping with the need for industrialisation, the protection policy was also liberalised. An industry seeking protection was to satisfy the

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20. For detailed criticism of the Industrial Policy 1945, consult NPC Sub-Committee Report on manufacturing industries, specially p. 35.



Tariff Board in the following respects:—

- (1) that it is an established industry and conducted on sound business lines; and
- (2) (a) that, having regard to the national or economic advantages enjoyed by the industry it is likely within a reasonable time to develop sufficiently to be able to carry on successfully without protection or state assistance,  
*or*  
 (b) that it is an industry to which it is desirable in the national interests to grant protection.

The Interim Tariff Board appointed in November 1945 for two years was vested with more powers. The Board was not only to investigate claims for protection but also to keep a watch over the progress of protected industry so that the efficiency could be maintained or improved and to inquire into the cost of the production of some industries at the instance of the Government. Though the Tariff Board was assigned a large number of functions<sup>21</sup> but adequate facilities were not provided to carry out the responsibilities entrusted to it. Further, the need for giving protection to embryonic industries was still not conceded to by Government.

Despite liberal policies enunciated by the Government, the production did not increase; rather there was a declining trend in production during the post-war period. Difficulty in replacement of worn out machinery, transport bottleneck, increasing labour trouble because of rising prices, and the worsening communal situation retarded the growth in production. Moreover, the Government had not yet taken positive steps to implement the policy announced and the political situation was also none-too-favourable.

### Progress of Some Important Industries

After reviewing the general trends in production during the period under review, we shall now discuss the development of some specific industries in details.

### Cotton Textiles

The cotton textile industry made substantial progress during the period under review which is indicated by the table<sup>22</sup> given on next page.

Despite Indo-Japanese Agreement and Mody-Lees Pact (under which the imports of cotton piece goods were correlated with the cotton exports and at the same time import duties were lowered both on Japanese and British cloth imports) which had the immediate effect of increasing imports,

21. Report of the Fiscal Commission, p. 55.

22. Table taken from the Tariff Board Report of 1947.

Year	No. of mills working	No. of mills idle	No. under construction	Installed spindles (lakhs)	Installed looms (lakhs)	No. employed (lakhs)	Cloth production (M. Yds)	Import
1933-34	320	32	28	97	1.95	3.85	2925	761
1934-35	336	28	42	97	1.99	4.14	3397	1077
1939	367	22	67	101	2.02	4.41	4269	706
1945	412	25	14	102	2.02	4.91	4727	6.90

there was gradual recovery in the industry as the severity of agricultural depression subsided. Spanish Civil War also brought extra orders. In fact in 1937-38, boom conditions were witnessed and the production in one single year recorded a jump of about 500 million yards and 67 mills were under erection in 1938-39 under the stimulus of boom. The period of 6 years preceding the II World War was one of continuous progress. The production of finer goods from imported cotton also increased. The progress of the industry was not, however, even in all provinces. There was substantial growth in Madras, Bengal and U.P. but the number of mills decreased in Bombay and Ahmedabad.

The boom of 1937-38 had exhausted its force soon and on the eve of II World War stocks of cloth were accumulating and some of the mills had to close night shifts. War again came as a boon to the industry and even mills on the verge of liquidation were given the nectar to survive the war.<sup>23</sup> Increased demand of cloth both for civil and military requirements and the stoppage of imports increased the prices. By June 1943, the prices had increased to more than 5 times as compared to pre-war level of prices. The Government was, therefore, compelled to intervene and regulate the production and prices of cloth. With a view to achieve maximum increase in output, the production of utility cloth was encouraged; varieties were reduced and production rationalised. Additional machinery and equipment could not be imported from abroad for expanding the output and increased production of over 500 million yards during the war period was mainly achieved by greater utilisation of existing machinery by introducing multiple shifts. Further, there was considerable deterioration in the quality of production during the war time.<sup>24</sup> Per capita

23. N.H. Thakker, *op. cited*, p. 65.

24. Index of quality change.

Year	Base year 1939=100	
	Bombay	Ahmedabad
1937	101	102
1939	100	100
1943	86	82
1945	85	82

Table adapted from Rosen's book, p. 184.

availability of cloth was reduced to about 2/3rds of the pre-war level on account of increased pressure of military demand and exports in the face of insignificant increase in production. India emerged as a leading exporter of cotton cloth and exports amounted to Rs. 46.1 crores in 1942-43 because of stoppage of Japanese supplies to several countries.

Before the controls were introduced the profits of the industry had recorded a very big jump and mills were simply able to coin money. Controls reduced the quantum of profits but still industry earned very handsome profits. In spite of huge profits earned during the war time, the industry did not conserve sufficient profits for replacement and modernisation of machinery.<sup>25</sup>

The technical efficiency of cotton mills in the country did not keep pace with the trends in Japan and other countries. Excepting during war years there was considerable decline in the exports of cotton manufactures. On the eve of the World War II, the industry was struggling hard to maintain and expand production. It was also the esteemed opinion of the Fiscal Commission 1949 that the efficiency of labour and the quality of management did not improve appreciably during the period of protection. In fact the need for exercising control for the healthy growth of the industry was emphasised by several members of legislature even at the time of granting protection.<sup>26</sup> The technical efficiency of up-country mills was specially low and most of the mills established in the other centres were below optimum size.<sup>27</sup>

### Jute Industry

The fortunes of jute industry have always been dependent on the vicissitudes of international trade. With the recovery in the world trade, the demand for jute manufactures began to increase and from November 1934 jute mills decided to increase production by gradually unsealing the looms. By 1937-38 all restrictions on production were withdrawn by

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25. Bombay Millowners Association in its evidence to Fiscal Commission 1949 stated that cash available with the mills of Bombay Island was Rs. 45 crores as against the requirements of Rs. 100 crores for rehabilitation and modernisation.

26. Report of the Fiscal Commission, p. 68.

27. Speaking on Cotton Tariff Amendment Bill 1934 several members like K.P. Thompson, N.M. Joshi, Ziauddin Ahmed had emphasised the need of State control for the healthy growth of the cotton industry. Mr. K.P. Thompson in his Minute of Dissent in Select Committee Report on Tariff Amendment Bill 1934 observed, 'I have no doubt that unless some kind of control is exercised over the industry by the State, it will not, even if it can, get out of the moribund condition into which it has now fallen. If the industry looks up to the State for protection, the State has every right to lay down certain conditions under which protection can be given.'

I.J.M.A.<sup>28</sup> Jute exports which stood at 6.7 lakh tons in 1933-34 exceeded 1 million mark by 1937-38. The world recession again affected the exports. As attempts for voluntary restriction of output did not succeed, Government by an Ordinance in 1938 restricted the hours of work to 45 per week (except for small jute mills having 175 looms or less) for regulating the output of the industry.

Increased profitability led to further expansion. There were 56,872 looms in 1935 and by 1939 the number of looms had increased to 65,343. According to the Report on the Marketing of Jute (1941) the industry had 30 per cent excess capacity.

The Second World War again brought fortunes to the industry which was suffering from the effects of recession. With the increase in war demand, the production increased and touched the record level of 1,279 thousand tons in 1941-42. All restrictions on production were removed and mills had to work sometime for 60 hours a week. High prices of raw jute (as a result of diversion of land from jute cultivation to rice cultivation because of abnormal rise in the prices of rice) and shortage of coal adversely affected the production in 1944-45. After the cessation of war the world demand for jute manufactures again picked up. The following table shows the production trend during the war years:—

<i>Year</i>	<i>Production (Tons)</i>
1939-40	12,76,909
1940-41	11,09,252
1941-42	12,78,961
1942-43	12,47,023
1943-44	10,67,857
1944-45	10,96,694

SOURCE : P. J. Thomas : *India's Basic Industries*—page 344.

Notwithstanding the monopolistic position and the high profits, the industry did little to initiate research for finding out additional uses for jute fabrics and improve the quality of jute manufactures. The strategy of the industry had been to adjust production to world demand by restricting output. Abnormal profits in the industry had created excess capacity which incidentally showed the need for regulating the establishment of new mills and expansion of existing mills. During the II World War, the industry again exploited the cultivators of raw jute and the Government did little to prevent the exploitation of the cultivators. In fact, as the industry was dominated by the Britishers, the Government did not even levy taxes commensurate with the profits of the industry.

28. Savani, *op. cit.*, p. 40.

### Sugar Industry

The real development of sugar industry started with the grant of protection in 1932, which was granted on the recommendation of the Sugar Committee of the Imperial Council of Agricultural Research. In 1931-32 there were 31 factories producing 1,58,000 tons of sugar and the country was dependent on Java sugar for a very major portion of its requirements. Imports in 1930-31 amounted to 9 lakh tons. The development of sugar industry exceeded even the wildest estimates<sup>29</sup> and by 1935-36 production had exceeded 9 lakh tons, reducing the sugar imports to a negligible proportion. The production in the next year was so heavy that the entire stocks could not be disposed of at reasonable prices and a Syndicate was established to regulate production and sales for keeping up prices. By 1938-39 the industry ranked third among all the organised industries in total capital and fourth in fixed capital.<sup>30</sup> Most of the units were established in U.P. and Bihar which remained to be the biggest producers of sugar. But later on, Mysore, Hyderabad, Bombay and Madras also became relatively more important as these had climatic advantage over U.P. and Bihar.

In order to safeguard the interest of the cultivators who were not getting adequate price, an Act was passed by the Central Government which enabled the local governments to fix minimum prices for sugarcane which was now to be purchased either direct from cane growers or their recognised associations. There was, however, no uniformity in the prices fixed by the various local governments and therefore a better course would have been a unified action by some Central Authority in respect of prices.

Profits in sugar industries were not as high as in cotton and jute industries<sup>31</sup> but were, however, quite substantial in most of the units. The industry did not care to accumulate enough reserves to meet successfully slumps and crises.<sup>32</sup>

### Iron and Steel Industry

Iron and steel industry had turned the corner by 1934 and on the eve of the II World War had captured a major portion of the home market by displacing foreign imports. It may, however, be noted that the total consumption of steel in 1939 was about 6 lakh tons less than in 1929.

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29. *Vide* Speech of Sir George Schuster in Legislative Assembly on Sugar Excise Bill on 18th April, 1934.

30. Rosen, *op. cit.*, p. 33.

31. Average rate of return between 1938-47 was 6.9 per cent as against 15 and 12.1 per cent in cotton and jute industries. *Vide* Mehta, *op. cit.*, p. 112.

32. Evidence of Indian National Sugar Mills Workers Federation, Lucknow, before Fiscal Commission 1949.

Another new development of the period was the establishment of the second plant for steel making in 1937 which became possible on account of the merger of Bengal Iron Company into Indian Iron and Steel Company in 1936 and the increasing profitability of steel making. The new plant of Steel Corporation of Bengal had a capacity of 2-2½ lakh tons and drew its requirements of hot iron for steel making from the plant of Indian Iron and Steel Company at cost plus 5 per cent and was to participate in the profit of ISCO to the extent of 20 per cent.<sup>33</sup> The first furnace of Steel Corporation of Bengal was blown during the last quarter of 1939.

Steel industry which was already making steady progress during the six years preceding the II World War got further opportunity for expansion when II World War started and imports were drastically curtailed. Production of finished steel in protected varieties which was 7.26 lakh tons in 1938-39 had reached the peak in 1943 when the production amounted to 11.3 lakh tons. Thereafter, there was decline in the production on account of the difficulty of obtaining coal and transport bottleneck and by 1945-46 the production had come down to 9.5 lakh tons. During the war period special steels such as alloy steel, high silicon and some other varieties of steel for war purposes were also developed. Highest increases were recorded in the production of G-I0 sheets, spring steel, tinplates, tool steel and light structurals. On the other hand production of rails, bars up to ½", heavy structurals remained constant or declined. Further the cost of production in India became lower than foreign countries and therefore on recommendations of Tariff Board 1947 protection was discontinued.

The following table indicates the progress of steel industry during the period under review:—

**Production of Iron and Steel in India<sup>34</sup> (Protected Varieties)**

	1933-34	1938-39	1945-46	% increase over 1933-34
	(000 tons omitted)			
Pig Iron	1109	1576	1489	+ 34
Iron Castings etc.	68	88	122	+ 79
Steel Ingots	721	977	1313	+ 82
Finished Steel	551	726	949	+ 72

It may be interesting to compare our steel production with that of

33. Investor Year Book for 1942-43 published by Place Sddons & Cough.

34. Table adapted from 1947 Tariff Board Report.

the U.S.A. Despite favourable treatment, there was 72 per cent increase during the period under review; while in the U.S.A. steel production which was 26 million tons in 1933-34 had reached the peak at 88 million tons in 1943. Thus both absolutely and relatively there was much greater growth of Iron and Steel industry in the U.S.A. as compared to India.

In fine, the Fiscal Commission was satisfied with the progress of industry under protection and was of the view that 'the extent of protection was not greater than what was needed to put the industry on a sound basis.'

### Associated Industries

With the growth of steel industry, a number of re-rolling mills and other industries associated with steel industry were also set up. Second World War imparted a great stimulus to all these industries as the imports were drastically curtailed. Government took special interest in developing machine tools industry and procured the services of foreign experts and ensured the supply of raw materials. It was not, however, possible to make the various types of machinery and machine tools and the country was dependent in foreign imports.

The growth of these industries can be gauged from the table given below which shows increase in the employment generated during the war period in British India.

<i>S. No.</i>	<i>Industry</i>	<i>1939</i>	<i>1944</i>	<i>% Increase</i>
1.	Iron and Steel Smelting and Steel Rolling Mills	40,790	58,487	43
2.	Engineering : General	50,346	1,38,153	174
3.	Electrical Engineering	7,377	23,049	213
4.	Shipbuilding & Engineering	18,534	33,647	82
5.	Coach building and motor car repairing	6,824	23,645	246

### Cement Industry

In order to eliminate internal competition and secure economies in transport and other expenses, the various units in the cement industry with the exception of Sone Valley Cement merged into a new company known as Associated Cement Companies. The new company succeeded in its objectives and also established four new factories for meeting increased demand. In 1938 Dalmia Group established four factories, and a severe competition in rate cutting ensued with A.C.C. In 1940 an agreement was concluded between these two major groups and they agreed to market their product through the Central Organisation. As the war developed, the demand far outstripped the supply.

To ensure control over prices and distribution, the Government imposed control on the industry in 1942. During this year Government off-take amounted to 90 per cent of the total production. The following table shows the growth of the industry during the period under review:<sup>35</sup>—

(Figures in tons)

Year	Production	Imports
1934-35	7,81,000	49,180
1938-39	15,12,000	21,214
1942-43	21,93,000	..
1945-46	20,75,000	..

A study of the above table indicates steady increase in the production and the slight decline in production after 1942-43 was due to wear and tear of machinery and shortage of coal. The increased production was obtained both by expanding the size of the existing plants and establishing new plants. There was also some change in the location of new plants. In 1935 factories were mainly situated in C.P. and Rajasthan but by 1945 factories were also established in Bihar, Hyderabad, Bengal and Central Indian states.

### Paper Industry

Tempted by the high profits earned by the English firms, more Indian firms made a debut in the industry. The mills started by the Indians were of smaller size and their production was less profitable than those of British units.<sup>36</sup> As a result, the production capacity had greatly increased in the pre-war period and there was over-production.

But with the outbreak of World War II, Government demand for paper increased and in the earlier stages Government took away more than 90 per cent of the production but later on Government demand was reduced to 70 per cent of the production. Production was doubled during the war period and the increased production was achieved by lowering the quality of the paper. The following table shows the progress of the industry:—

Year	Capacity (000 tons)	Production (000 tons)	Employment
1937	58.6	53.8	9702
1940	95.6	87.7	11284
1946	105	106	18,807

35. Thomas, *op. cit.*, p. 324.

36. Mehta *op. cit.*, p. 96.



During this period the growth of the industry was more marked in Bihar and Orissa, Punjab, Madras and Mysore.

### Chemical Industry

Chemical industry had been developed on a small scale and on the eve of World War II gave employment to 4,750 workers in British India. The most important chemical produced in the country was sulphuric acid. In 1939, there were 23 factories producing 26,000 tons of sulphuric acid from imported sulphur. Besides, 6 factories produced sulphuric acid for their own consumption. There was, however, little or no production of chemicals like caustic soda, soda ash, naphthols, potassium chloride, etc.

With the outbreak of the II World War, the production of chemicals was stepped up for replacing the imports and meeting the increased demand. The number of persons employed in chemical industry increased to 16,443 showing an increase of 246 per cent over the pre-war base. Production of sulphuric acid increased to 59,000 tons in 1944 and even this increase in production fell short of the requirements which were estimated at 1,15,000 tons. Supplies, therefore, had to be controlled and distributed according to the importance of the needs.

Further, success was also achieved in producing chemicals like caustic soda, soda ash, sodium carbonate, sodium bicarbonate, etc. Dhrangadhra Chemicals, Alkali and Chemicals Corporation, Tata Chemicals and Metturr Chemicals were the main producers of alkali chemicals. But even so, the imports of soda ash, and caustic soda increased on account of the increased war demand as is clear from the following table:—

**Imports of Caustic Soda and Soda Ash<sup>37</sup>**

<i>Year</i>	<i>Caustic Soda (tons)</i>	<i>Rs.</i>	<i>Soda Ash (tons)</i>	<i>Rs.</i>
1938-39	25,037	45,45,403	65,426	60,87,763
1944-45	42,358	131,06,839	78,882	122,81,869

The production could not be stepped up during the war period mainly because of the lack of machinery and technical know-how.

### Minerals

Among the mineral group of industries, coal had been most important followed by manganese, gold and mica. The internal production of gold in Mysore was insufficient to meet the requirements and the country was

37. Thomas, p. 140.

dependent on imports for a very major portion of its requirements. Manganese and mica were mainly produced for export.

The economic depression of 1930 had exposed the coal industry to the most serious economic blizzard in its history and the production fell below 20 million tons in 1933. From 1936 onward, there was steady progress because of the increased demand for coal as a result of industrial revival and concessions announced in railway freight and port charges for helping export trade in coal. By 1938 the production had exceeded 28 million tons. During the initial years of the war, production further picked up to meet the increased demand. There was, however, a steep drop in production in 1943 because of labour shortage, transport bottleneck and inadequate plant replacements. As a result, there was a coal famine of unparalleled magnitude which had serious repercussion on industrial production in the country. Labour laws were relaxed and vigorous efforts were made to raise coal production. With the result that the coal production reached 30 million tons in 1947; still the full demands could not be met.

The following table shows the production of coal:—

<i>Year</i>	<i>M. tons</i>
1934	23
1937	25.9
1938	28.3
1942	29.4
1943	25.5
1945	28.9
1947	30

Increased production of coal during the war period was achieved at a lower level of labour efficiency. For example the labour force employed in the industry had increased by 26 per cent between 1939-44 while the coal production had decreased during this period.

Owing to the shortage of coal, the prices had become very remunerative and the industry was able to earn substantial profits. Average rate of dividend during 1938-47 was above 10 per cent. A committee known as Indian Coal Fields Committee (1946) was appointed to make recommendations for the proper utilisation of coal.

### FOREIGN TRADE

The impact of the depression began to subside after 1932 and our foreign trade showed signs of improvement from 1932-33 on account of improved foreign demand for our raw materials. Armament boom gave a further dose to recovery. The country had hardly recovered from the effects of depression when the separation of Burma in April 1937 inflicted

serious injury to our external balance of payment. The recession in the world trade in 1938 also adversely affected our trade. But for the export of distress gold, the situation would have been more complicated. Even then, our foreign trade had not reached the dimension achieved in the pre-depression period.<sup>38</sup> Our exports which amounted to 3.7 per cent of the total exports in 1928 came down to 2.9 per cent of the total world exports in 1938. Thus our exports did not keep pace with the increased exports in the world. Terms of trade also did not remain favourable. It was only in 1944-45 that the terms of trade became favourable.<sup>39</sup>

Since the terms of Ottawa Pact were not favourable,<sup>40</sup> it was denounced by the Legislative Assembly in March 1936 and a Notice of Denunciation was given on 13th May, 1936. In consequence, a new agreement was entered in 1939 on more favourable terms. Under this agreement, only 16 per cent of the total imports from the U.K. were in the category of goods subject to preference as against 82 per cent of the goods in Ottawa Agreement. The number of preferential items was reduced from 106 to 20. Imports of cotton cloth were linked with the offtake of cotton. There was also a trade agreement with Japan under which imports of cotton cloth from Japan were linked with the offtake of cotton. The quota of Japanese cloth was fixed at 400 million yards against the off-take of 1½ million bales of cotton. The import duty on Japanese cloth was reduced from 75 to 50 per cent *Ad. Val.* subject to a minimum specific duty of 5¼ as. (33 P.) per lb. This agreement was renewed on expiry on more favourable terms.

At a time when our foreign trade was expanding came the Second World War which brought about substantial changes in the foreign trade. Export trade was controlled to enforce blockade against the enemy countries and utilise the available shipping space in the best possible manner. Imports were also reduced to the minimum for conserving foreign exchange

38.	Average of	(Figures in crores of Rs.)	
		Imports	Exports
	1925-26 to 1929-30	240	327
	1935-36 to 1939-40	150	181
	1940-41 to 1944-45	152	204

SOURCE : Report of the Fiscal Commission—page 34.

39.	Index of Foreign Trade (1927-28=100)							
	1938-39	1939-40	1940-41	1941-42	1942-43	1943-44	1944-45	1945-4
Exports	101.2	105.8	89.2	94.8	63.3	54.6	53.5	62.16
Imports	88.7	90.5	72.2	65.8	33.3	35.1	63.0	68.3

SOURCE : R. L. Varshney—*India's Foreign Trade*, pages 31 and 32.

40. A Committee appointed under the Chairmanship of Sir Purshotamdas Thakurdas to advise about the possibility of entering into bilateral trade agreement came to the conclusion that the advantage available to India (under Ottawa Agreement) has not been as great as was anticipated.

and there was considerable decline in the volume of trade during the war period. Since the imports were reduced more than the exports the balance of trade remained very favourable. We were not only able to retire our Sterling debt of about £350 million but also accumulate sterling balances to the tune of more than Rs. 1,700 crores. The following table shows our exports and imports for the period under review

(Rs. in crores)

<i>Year</i>	<i>Imports</i>	<i>Exports</i>	<i>Balance</i>
1933-34	119	216.7	+97.47
1937-38	181.9	209.5	+27.6
1938-39	152.3	169.2	+16.9
1943-44	136.4	216.7	+80.3
1944-45	256.4	234.2	-22.2
1945-46	300.7	273.8	-26.9

### Composition of Trade

There were several changes in the composition of trade during the period under review. Group-wise, there was consistent decline in the imports of manufactured articles while the imports of raw materials had become more prominent. There was consistent increase in the exports of wholly or mainly manufactured articles and steady decline in the exports of raw material. The following table shows the group-wise composition of our imports and exports trade in percentages:<sup>41</sup>

Groups	1933-34		1938-39		1945-46	
	Imports	Exports	Imports	Exports	Imports	Exports
1	2	3	4	5	6	7
1. Food, Drink & Tobacco	10	25	15	14	9	23
2. Raw Materials	14	47	22	45	48	28
3. Articles wholly or mainly manufactured	75	27	61	30	41	47
4. Postal Articles not specified	1	1	2	1	2	2

Commodity-wise analysis shows that exports of tea and jute manufactures continued to increase throughout the period and war did not adversely affect their exports; while exports of raw jute and oilseeds which were showing increase during the pre-war period declined substantially during the war period but again picked up after the War because of the resumption of trade with the continental countries. Exports of short staple cot-

41. Evidence of Indian National Steamship Owners Association, Bombay, before Fiscal Commission 1949 reported in Volume III,

ton slightly declined between 1933-34 and 1938-39 but there was a steep drop during the war because of stoppage of supplies to Japan which was the main buyer but resumed upward trend during the post-war period. The II World War gave a great fillip to the exports of cotton cloth and yarn on account of the withdrawal of British and Japanese supplies from Middle-East countries and Africa and the country now emerged as one of the leading exporters of cotton cloth and yarn in the world. Net export amounted to about Rs. 45 crores which declined in the post-war period. As a result of protection policy, there was consistent decline in the imports of cotton yarn and manufactures, sugar, cement, matches and other consumer goods. On the other hand imports of oil specially mineral oil), chemicals, dyes and colour, long staple cotton continued to increase throughout the period because of the increasing industrialisation of the country. The growth was specially marked in case of the imports of vegetable oil and long staple cotton whose imports amounted to Rs 6.7 crores and Rs. 3.5 crores in 1933-34 but by 1945-46 their imports had reached to Rs. 79.6 crores and Rs. 22.8 crores respectively. The imports of machinery, metals (ferrous and non-ferrous) and foodgrains which were showing an upward trend during the pre-war period declined during the war on account of the exigencies of the war but resumed upward trend immediately thereafter. The spurt in the imports of foodgrains after the war was mainly because of the unfavourable crop season of 1946-47 and the growing pressure of population. Comodity-wise exports and imports are given in the following table:—

### Trend of Exports and Imports in Respect of Important Items

(All figures in crores of Rs.)

<i>Exports</i>	1933-34	1938-39	1942-43	1945-46
Grains and Pulses	11.7	7.7	6.9	2.7
Tea	19.8	23.2	31.9	35.6
Gums and Resins	2.6	1.5	3.2	4.9
Oilseeds	13.6	15.0	10.5	14.5
Raw Cotton	27.9	24.6	5.3	15.9
Raw Jute	10.9	13.3	9.0	15.8
Cotton Yarn and Manufacture	2.7	7.1	46.1	33.9
Jute Manufactures	21.3	22.0	36.4	59.6
<i>Imports</i>	1933-34	1938-39	1942-43	1945-46
Foodgrains and Pulses	0.8	13.7	0.3	9.2
Vegetable, Animals and Minerals Oils	6.7	15.6	27.7	79.8
Cotton	3.5	8.5	15.4	22.8
Chemicals, Drugs & Medicines	4.9	5.6	6.3	10.2
Dyes and Colours	3.4	4.0	5.4	11.4
Machinery	13.3	19.7	10.5	22.7
Iron and Steel and manufactures	[5.5	6.6	2.8	6.6
Metals other than Iron & Steel and manufactures	3.9	4.1	3.3	6.1
Cotton Yarn and manufactures	17.7	14.1	1.3	1.8

Evidence of Indian National Steamship Owners Association, Bombay already quoted.

### Direction of Trade

In the pre-depression period, we were importing more from the Commonwealth countries while most of our exports went to non-Commonwealth countries. But during the depression period and after this tendency was reversed as is clear from the following table:—

Year	Exports (Percent- age <sup>42</sup> share of)		Imports (Percent- age <sup>43</sup> share of)	
	Common- wealth countries	Other countries	Common- wealth countries	Other countries
1920-25	39.2	60.8	65.4	34.6
1925-30	36.4	63.6	54.8	45.2
1930-35	43.5	56.5	46.9	53.1
1935-40	50.4	49.6	53.8	46.2
1940-45	64.3	35.7	51.5	48.5

From the study of the above table we find that we were leaning more heavily on U.K. for our exports where they enjoyed preferential treatment and also because Continental countries were unable to import more from us because of the payment difficulties that they faced during the depression period. During the World War II, our trade relations with Continental countries and Japan were cut off resulting in the loss of exports to these countries. Imports from Commonwealth countries were reduced in 1930-35 period but later on picked up on account of the preferential treatment accorded under Ottawa Pact. Japan and Germany however proved formidable competitors and were successful in increasing their shares in our imports despite the imposition of heavy duties on their products. During the war years there was substantial increase in our trade with the U.S.A. In 1935-40, the share of U.S.A. in our exports and imports which was 10 and 7 per cent but by 1947-48 her share jumped to 20 and 30% respectively. In fine, the pattern of trade in the year preceeding the II World War was affected by protective policy. Ottawa Agreement and international situation. In the war years our trade with enemy countries was stopped and the quantum of trade was drastically curtailed, affecting our imports more than the exports. As a result India emerged as a creditor country whereas she was a debtor country in the pre-war period. Of course, we had to tighten our belt and were unable to replenish our requirement of food, raw materials and machinery during the war years.

### CONCLUSION

The historical review of the growth of industries and of the changes

in the pattern and direction of trade appears to have a strange positive correlation. The principal consumer goods industries like cotton, sugar, paper, etc., were expanding on account of the favourable effects of protection. The imports of most of the consumer goods were being replaced by the manufactures of indigenous consumer goods industries and therefore the imports of these goods were declining. As raw materials were being consumed progressively at home so their exports were also declining. But on the other hand, the imports of machinery, chemicals, etc., coming in the category of producers goods were increasing. Likewise the exports of the goods manufactured by leading consumer industries were also expanding. In brief, it can be said that the exports of raw materials were being replaced by exports of manufactures, imports of consumer goods being replaced by imports of producers goods. This was a very favourable change as it illustrated the changing pattern of the economy of the country from mainly agricultural to industrial economy. The only sore point being that the development was not taking place at a fast rate so as to absorb the increasing population of the country and factory industries accounted only for a small portion of the national income.

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42. Report of the Fiscal Commission, p. 42.

43. *Ibid.*, p. 38.

## CHAPTER V

### AGRICULTURAL DEVELOPMENT (1934-1947)

In Chapter III, developments during the agricultural sector between 1914 to 1933 were analysed. The main problem was of depression which had knocked the bottom out of the rural economy. In this chapter, we shall critically examine the various measures taken by the Central and provincial governments in relieving the rural masses from the effects of depression as also the new set of problems created by the Second World War.

To relieve the rural masses from the effects of depression government efforts were directed to the following ends:—

- (i) Measures for solving the rural indebtedness by liquidation of old debts and control of moneylending.
- (ii) Measures for encouraging the growth of the cooperative movement for providing the finance for redemption of old debts and carrying out agricultural operations.
- (iii) Land reforms for giving security of tenure and fixation of reasonable rates of rent so that the cultivators may have better income and status.
- (iv) Measures for improving the marketing of agricultural produce to ensure more income.
- (v) Miscellaneous measures.

#### Debt Legislation

The most important set of measures were taken in the direction of lightening the burden of indebtedness and regulating the business of moneylending in the countryside.

The problem of rural indebtedness existed even before the depression. General state of indebtedness is as old as the British rule. Santal rebellion and Deccean riots of 1872 were the outcome of extreme indebtedness of the peasantry in those areas.<sup>1</sup> The various famine commissions expressed great concern about the growing volume of indebtedness. Since the measures taken were not comprehensive and were executed in a half-hearted

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1. Preface of D.R. Gadgil in Sivaswami Book, *Legislative Protection in Agriculturists*.



manner, the Government failed to strike at the root of the problem, the indebtedness continued to increase<sup>2</sup> and assumed alarming dimension during the depression.

Exigencies of the situation demanded the granting of moratorium pending suitable relief legislation. The nearest approach to moratorium was the U.P. Notification regarding the sale of agricultural land. Encumbered Estates Act of 1934 stayed the proceedings in suits, while the Temporary Regulation of Executions provided for staying the execution against judgment debtors and enabled them to pay off the debt in instalments. The precedent of U.P. was followed in most of the provinces only after 1937.

The next step was the reduction of debt on voluntary basis. For this purpose legislation was undertaken in the provinces on the model of C.P. Act of 1933.<sup>3</sup> Debt Conciliation Boards were constituted to reduce the amount of debt with the consent of creditors. As a result of inducements offered and the economic situation prevailing in the countryside, a substantial section of creditors agreed to abide by the decision of the Conciliation Boards.

Since a fairly large number of creditors did not opt for the voluntary debt reduction through the Conciliation Boards, Acts<sup>4</sup> were passed in almost all provinces for the compulsory debt reduction. U.P. Agriculturists Relief Act of 1939 was a very comprehensive measure for scaling down the debt. Besides, certain types of property and goods were also exempted from attachment and sale in the execution of decree.

Following the recommendations of the Royal Commission on Agriculture and Central Banking Enquiry Committee, the Punjab Government gave the lead by enacting the Punjab Regulation of Account Act 1930. Other provinces followed suit. The main provisions of the important Acts inter alia were: (1) licence and registration of moneylenders, (2) maintenance of accounts in prescribed form, (3) furnishing receipts and periodical statement of accounts to debtors, (4) protection of debtors from molestation and intimidation. The universal defect of these Acts was the

2. The various estimates made by different authorities at different times show the growing volume of indebtedness as is clear from the given table:—

Year	Amount of Rural Debt in British India	Authority
1911	Rs. 300 crores	Sir Edward Maclagan
1924	Rs. 600 „	Sir M. Darling
1930	Rs. 900 „	Indian Central Banking Enquiry Committee
1935	Rs. 1,200 „	Dr. R.K. Mukherjee
1938	Rs. 1,800 „	Mr. E.V.S. Maniam

3. Details regarding the Acts are given in Appendix 'A'.

4. Details in Appendix 'B'.

absence of provision for supervising or inspecting machinery and the penalties for the infringement were not sufficiently deterrent.

## II. Growth of Cooperative Movement

Despite high hopes placed by the Royal Commission and Central Banking Enquiry Committee, Cooperative Societies failed to rescue the rural masses when the help was needed most at the time of depression. As a result of steep fall in prices, there was very heavy accumulation of dues and the assets of the societies were frozen. The movement received a great set-back and the conditions of most of the societies became critical.<sup>5</sup> Between 1935-39, Committees or special officers were appointed in almost all provinces for rehabilitating the cooperative movement and ensure its future growth on sound lines. The loans due to the primary societies were scaled down to the repaying capacity and were made payable in easy instalments.

Unlike governments of several foreign countries, Indian Government did not provide adequate finance to weather through the storm and Government contribution amounted to 1.6 per cent of the working capital in 1939-40.<sup>6</sup> The Reserve Bank of India failed to discharge its full responsibility as envisaged by the Central Banking Enquiry Committee<sup>7</sup> and adopted a policy of extra caution.<sup>8</sup> The attitude of the Reserve Bank was in marked contrast with the course of action followed by the Central Banks in countries like Australia, New Zealand, etc., which not only provided fin-

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5. Only a very negligible percentage of societies could be put in 'A' class and 8.8 per cent of societies were under liquidations and many more deserved to be liquidated—Appendices A and B of Review of Cooperative Movement in India 1939-40, published by the Reserve Bank of India.

6. *Ibid.*, p. 78.

7. Central Banking Enquiry Committee had envisaged that the proposed Reserve Bank should be specially charged with the responsibility of taking suitable steps for providing finance to the cultivators on easy terms. A provision was, therefore, made in the Reserve Bank of India Act for the formation of an Agricultural Credit Department to study all the questions pertaining to agricultural credit and to coordinate the operations of different organisations engaged in providing agricultural credit. The Bank was also required to submit a report within 2 years with proposals for legislation for improving the credit machinery and effecting close cooperation between agricultural enterprises and the operation of the bank. The Reserve Bank of India did not realise the full responsibility in this matter.

8. The Reserve Bank of India granted seasonal finance up to 9 months on this basis of warehouse receipt. This facility could not, however, be availed of in the absence of independent warehouses in the country. Regarding the cautious policy, NPC Sub-committee Report on rural marketing and finance observed as follows:—

'We believe that on the whole the Reserve Bank has been pursuing an over-cautious policy,' p. 138 of the Report.

ance on liberal terms but also spent a portion of the income of the Note Issue Department on agricultural credit operations.

It was only during the Second World War that the progress became satisfactory. There was an appreciable rise in the membership and societies possessed enough funds to meet the requirements of their members. There was specially marked increase in the number of non-agricultural societies which were formed to distribute the scarce consumer goods. The following table reflects the progress of cooperative movement during the period under review:—

**All India Progress of Cooperative Movement<sup>9</sup>**

Year	No. of Societies of all types		No. of Primary Societies Membership		Working Capital	
	Central	Primary	Agricultural	Non-Agricultural	Total (000)	% of W.C. to owned Funds
<i>Average for five years</i>						
1925-26 to 1929-30	1981	91,955	2,79,562	8,97,279	74,89,13	22.8
1930-31 to 1934-35	1612	1,04,102	3,03,628	12,58,641	94,61,06	27.2
1935-36 to 1939-40	1129	1,15,831	34,37,873	16,38,869	1,04,67,73	29.7
1940-41 to 1944-45	1053	1,48,835	47,68,173	24,49,632	1,24,34,74	29.9
1945-46	1069	1,71,102	56,42,671	35,29,673	1,64,00,09	29.0

It may be interesting to note that even after the progress during the war years, the cooperatives catered to the needs of about 10 per cent<sup>10</sup> rural population and did not work the miracles its original sponsors hoped for.<sup>11</sup> Moreover, too much attention was concentrated on the development of credit societies but the entire life of villagers should have been brought within the compass of the cooperative solution.<sup>12</sup> The principle of unlimited liability also proved a hindrance in the growth of credit cooperative societies. Greater cooperation of the Government was also essential to rid the movement of the many malpractices and for providing additional finance.

9. E.M. Hough: *Cooperation in India*, II Edition, p. 346.

10. *Famine Inquiry Commission* 1945, p. 293.

11. E.M. Hough: *Cooperation in India* (II Edn.), concluding chapter.

12. Reserve Bank of India: *Review of the Cooperative Movement in India*, 1935-40, p. 29.

The Government of India, therefore, appointed a Committee in 1945 under the chairmanship of Shri R.C. Saria for ensuring the healthy growth of the movement during the post-war period. The Committee favoured the growth of multipurpose societies and made many useful recommendations for covering 30 per cent rural population within a decade.

For providing the long term finance, Royal Commission on Agriculture had favoured the growth of land mortgage banks. It was, however, only in Madras that land mortgage banks made some progress but in other provinces land mortgage banking was inadequately developed or not developed at all. On 30th June, 1940 there were 119 banks with outstanding loans amounting to Rs. 2.18 crores.

### Land Reforms

With a view to redeeming the pledge given by the All-India Congress Committee in its Election Manifesto Congress governments in some provinces passed or amended tenancy Acts to provide relief to the cultivators. In Bengal enhancement of rent was suspended for 10 years, interest on arrears of rent was fixed at  $6\frac{1}{2}$  per cent and right of pre-emption was conferred on co-sharer. Bihar Tenancy Act went a step further, by cancelling all enhancements of rent made between 1911 and 1936 and reduced them in proportion to fall in prices. Tenants in occupation of land for 12 years were conferred hereditary rights in their holdings and interest on arrears of rent was fixed at  $6\frac{1}{4}$  per cent. U.P. Tenancy Act 1939 was a far more comprehensive measure. Statutory tenants and tenants cultivating 'Sir' land were made hereditary tenants. Rents were scaled down and landlord had no right to enhance the quantum of rent. C.P. Tenancy Act abolished 'Begar' and the transfer of land to cultivators was allowed. Bombay Tenancy Act 1938 (which was implemented in 1941 in a limited area) specified the grounds on which tenants could be ejected and allowed compensation for improvements effected.

Tenancy legislation did not provide very substantial relief to the tillers of the soil as the problem of subletting could not be dealt with effectively.<sup>13</sup> The benefit, therefore, did not always reach the actual tillers

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13. Except in UP., C.P. and Bihar considerable areas of land were cultivated by tenants-at-will who had no security of tenure and had to pay excessive rent. In Punjab 48.2% land was cultivated by tenants-at-will while in Bengal crop sharer cultivated 20% of the land. In Hyderabad tenants population was estimated at 40% of the land owning class. In Bombay 42% of the area was worked by tenants most of whom were merely tenants-at-will. Similarly considerable area was cultivated by tenants-at-will in Madras and Orissa. (Information based on Tenancy Legislation in India, p. 5).

of the soil who continued to be exploited and rack rented.<sup>14</sup> Floud Commission rightly observed: "The vital blunder was to attach occupancy right not to the land but to a particular class of tenants who might be non-agriculturists or might cease to cultivate."<sup>15</sup> Further the right of free transferability also proved a mixed blessing as it tended 'to facilitate the transfer of raiyati lands into the hands of mahajans and non agriculturist.'<sup>16</sup>

The problem of conflicting interest in the land could be solved by abolishing all intermediaries between the tiller and the Government. Congress governments in provinces realised this but could do nothing because of the provision of Section 299 of the 1935 Constitution.

### Marketing

In order to ensure better price to the farmer for his produce, Government of India established the Central Agricultural Marketing Department in 1935. The Department conducted marketing surveys for a large number of commodities and made recommendations for improving their marketing. The Agricultural Produce (Grading and Marketing) Act was passed in 1937 and the goods processed according to the standards laid down could be sold under 'AGMARK' brand. But the progress was very slow and in 1945 only goods worth Rs. 7.31 crores (70 per cent of the value was represented by ghee) representing less than half per cent of the total value of agricultural produce, were sold under 'AGMARK' brand.<sup>17</sup> Similarly the progress in establishing 'Regulated Markets' was also slow and such markets were working in C.P., Bombay, Madras and Hyderabad. The development of cooperative marketing also did not make much headway and sugar was the most important commodity handled as the mills in U.P. and Bihar were compelled to purchase sugarcane only through the cooperative societies.<sup>18</sup>

### Miscellaneous Measures

Government of India passed Sugarcane Act, 1934 which conferred on the local governments the power to enforce minimum prices in respect of sugarcane supplied to mills. This was probably the only measure under which Government compelled the millowners to pay a minimum price to

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14. The Crop sharer in most cases had to pay half of the gross produce as rent which was quite excessive. In its Madras tour Floud Commission was informed by revenue authorities that Pattadar's assessment was on an average 1/5th of what he receives from his sub-tenant. (Land Revenue Commission Report, Volume II, p. 28).

15. Report of Land Revenue Commission, Vol. 1, p. 67.

16. *Ibid.*, p. 71.

17. N.P.C. Report on Rural Finance and Marketing, p. 23.

18. Out of Rs. 11.4 crores worth of goods handled by the Co-operative Marketing Societies about Rs. 7 crores was in respect of sugar cane—Nanavati, *op. cit.*, p. 54. III Edition.

the cultivators and thus allowed the benefit of protection to be passed on to the cultivators. Besides attempts were also made to find market for Indian cotton in foreign countries, e.g., under Indo-Japanese Agreement 1934 and Modi-Lees Pact, imports of cotton cloth were linked with the offtake of Indian cotton. The Government also helped in the application of International restriction scheme in respect of tea by passing Tea Control Act. But this measure benefited the British capitalists who owned most of the tea plantations.

### Evaluation Measures Taken by the Government

Judging the Government policies in retrospect, one comes to the conclusion that remedial measures were not comprehensive to meet the situation and were rather taken too late. By that time incalculable harm had been done to the condition of rural masses and therefore the remedies at a later stage did not produce the desired effect. In fact, action was initiated in several provinces only on the advent of popular ministries in 1937.

Debt legislation measures were useful in so far as these helped the peasantry to redeem the debt with less difficulty than it would have to face otherwise. The exigencies of the situation demanded that the Government should have instituted agencies for providing finance not only for redeeming the old debts—reduced voluntarily or by Courts—but also for providing additional funds for carrying out agricultural operations.<sup>19</sup> Since Government failed to provide alternative sources of finance, credit became difficult to obtain and provisions of these Acts were evaded with the mutual consent of both the parties. By providing adequate credit on reasonable terms, through cooperative societies or otherwise, not only the acute shortage of capital in rural areas would have been mitigated but the legislation for controlling the activities of moneylenders would also have proved more effective.

As regards the reduction of land revenue, the benefit did not reach the tiller of the soil in all cases as a substantial number of cultivators were merely tenants-at-will who were required to pay excessive rent because of the growing pressure on land in the absence of alternative occupations.

The increase in rural indebtedness was only a symptom but not a disease in itself. The real cause of acute distress was the unremunerative character of prices which left hardly any surplus with the cultivator for meeting land revenue and debt obligations. M.L. Darling rightly pointed out in his speech in Legislative Assembly that the recurrence of unproductive debt could be solved only by increasing the earning power of the peasant.<sup>20</sup>

19. C. Brooke Eliot in his Speech in Legislative Assembly on 22nd September, 1931 had rightly emphasised the need for creating additional credit in which case the usurer would automatically disappear.

20. Speech of M.L. Darling in the Delhi Legislative Assembly on 24th September, 1936, p. 1827.

Raising the prices of agricultural produce in the country was much easier as the steep fall in rice was not due to any over-production<sup>21</sup> but due to lack of purchasing power of the rural masses. Their income and savings were so low that they were compelled to bring the produce to the market without retaining enough for their own consumption. For raising the prices, the Government could have undertaken purchase operations as was done in countries like Argentina, Canada, etc. For cotton, an agreement with America, Egypt and other cotton producing countries for restricting the cotton acreage and exports on the lines of international tea agreement would also have proved useful. For oilseeds, Government could have entered into barter deals with the continental countries. Restricting the acreage of export crops as was done in the case of jute, etc., during the Second World War was also desirable for raising the prices.

For injecting more purchasing power in the countryside, the Government could lend money to the public on liberal terms for undertaking work of agricultural improvement or construction work. The Government could also resort to extensive public works programme as it already had the experience of undertaking such works during the famines. The situation under depression also exhibited the lack of purchasing power with the rural masses as was the case during famines. By organising such works not only would the Government have added a fair amount to its revenues and national income but also stimulated the economic activity in the country. The Government, however, pursued an exactly opposite policy. Gross public investment was reduced from Rs. 81.44 crores in 1929-30 to Rs. 33.40 crores by 1933-34. Average percentage of net public investment to national income was .6 per cent during 1931-32 to 1937-38<sup>22</sup>—probably one of the lowest in the world.

It must not be supposed that the measures suggested above were not a practical proposition at that time. Other countries adopted such measures<sup>23</sup> and the members in Delhi Legislative Assembly also advocated the adoption of such a course of action.<sup>24</sup> Government also had no difficulty in raising funds at a low rate of interest in the world market.<sup>25</sup> The funds raised could be invested in agriculture through some appropriate machi-

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21. Speech of Rai Bahadur Kunwar Raghubir Singh in Legislative Assembly on 6th April, 1934, reported in Vol. IV of 1934.

22. All the figures have been taken from the article of M. John K. Thavraj, *Capital Formation in India. A Historical Study, 1898-1938*.

23. Measures taken by the foreign countries are given in "Government Measures Affecting Agricultural Price"—A League of Nations Publication.

24. Speeches of Members especially of N.M. Joshi and Barua—on 6th February, 1934 in Legislative Assembly on Depression.

25. The Finance Member of the Government of India admitted this fact in his Budget Speech in 1934.

nery.<sup>26</sup> In short, if we could, somehow, raise the income of masses, the marketable surplus would have easily disappeared and real problem could have been brought on the surface, i.e., there was a continuing deterioration in the nation's food supply and efforts were necessary to raise the productivity of the soil. Indeed a great opportunity was lost by wrong thinking. If the action could have been taken at that time to increase the productivity of the soil, the nation would not have faced the food shortage which it had to, during the period of Second World War and after.

The then Colonial power did not fully realise the gravity of the situation and felt that the measures taken were sufficient to meet the exigencies of the situation.<sup>27</sup> The complacent belief of the Government is also reflected in the 1934 budget speech of Sir George Schuster, the then Finance Member:

"There have been many alleviating factors which have resulted in avoidance so far of any really urgent crisis. The various provincial Governments have made substantial remissions in land revenue and water rates. Landlords have not pressed for their full rent. India's money-lending system has proved elastic and generally speaking demands for repayment of debts have not been pressed. As a result the great mass of agriculturists have had enough to eat and a sufficient margin in cash not only to pay taxes at the reduced level but also to maintain at a fairly reasonable level their purchases of necessities."

As regards the demand of members for undertaking expenditure on public works for stimulating purchasing power he agreed that proper time has come when we may utilise this method with beneficial results. But he wanted that initiative in this respect must come from provincial governments.

We are not in agreement with the views expressed by Sir George Schuster on the economic situation prevailing at that time and the remedial measures adopted were not adequate to meet the situation. According to the Census figures industrial employment in 1931 was less than what it was in 1911. The pressure on land increased as the income of the country artisans was still lower.<sup>28</sup> There is sufficient evidence to show that there was considerable under-nutrition and semi-starvation in the countryside. In fact, so great was the distress that they had to part with their bullion and sell a portion of the land to satisfy the debt and revenue obligations.

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26. N.P.C. Sub-Committee Report on 'Rural Marketing and Finance', p. 130.

27. Speech of Government Member Hon'ble Sir Frank Noyacee on 6th February, 1934.

28. Colin Clark: *Conditions of Social Progress* (1951 Edn.), p. 453. The ratio between agricultural and non-agricultural incomes was 2.25 as against .7 in Japan and Canada each.



The slow pace of recovery is also a pointer in the same direction.<sup>29</sup>

Thus the period of depression which marked the beginning of a new era of state responsibility and state assistance in other countries is characterised in India only by a continuance of the old time policy of *laissez faire* except for a few feeble attempts at controls. India perhaps was one of the few countries in the world where little positive action was taken by the state to meet the depression.<sup>30</sup> Schemes of rural reconstruction and development attracted attention only on the formation of popular ministries in provinces. But they could not do much because of their very short life, meagre finances and the unsympathetic attitude of the Central Government.

### Effect of Second World War

With the declaration of Second World War in 1939 a constitutional crisis was created and the popular ministries formed in the provinces by the Congress Party submitted their resignation. The new orientation of policy in respect of agriculture to which we had looked forward eluded us and faded away.<sup>31</sup> The Government was faced with the more urgent task of mobilising all resources for the war efforts and assumed vast powers under the Defence of India Act for this purpose.

Following the outbreak of War, the prices took an upward trend but slipped back by March 1940 as the prospects of war orders did not materialise immediately. The cultivators of commercial crops like cotton, jute, oilseeds, etc., were hard-hit on account of drastic reduction in their exports as enemy countries were the main buyers. Efforts were made to find alternative markets for the commercial crops and Meek Gregory Mission was sent to the U.S.A. to explore new avenues of sale. But in the main, efforts were directed towards restricting the cultivated area under these

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29. By 1937 the price index (base year 1929=100) had reached 97.5 in U.K., 91.8 in the U.S.A. and in Japan the index had touched 107; on the other hand price level in the country was only 74.5 per cent of the pre-depression level. Even on the onset of the Second World War the country was suffering from the effects of depression.

30. Report of the Price Sub-Committee on Agriculture, p. 19.

31. On account of the abnormal rise in the price of rice, the area under jute cultivation was less than the licensed area as is clear from the following table:—

Season	Licensed Area	Area sown (000 acres omitted)
1941-42	1634	1533
1942-43	3190	2704
1943-44	2559	2146
1944-45	2563	1694
1945-46	2547	2040
1946-47	2010	1520

crops by legislative action, grant of bonus and/or persuasion. The Government of India offered grants for propagation and bonuses to induce growers to reduce the cotton area by 30 per cent. Bombay and Hyderabad took legislative action for restricting area under cotton cultivation. The area under jute cultivation had to be licensed from 1941 onwards. As a result of Government propaganda the area under oilseeds was also reduced by about 30 per cent in 1941-42 in comparison to the previous year. But later on, the area under oilseeds increased because of increased indigenous demand.

The inflationary situation created by the War<sup>32</sup> however began to exercise its influence on the price level of foodgrains from 1941 onwards. In the beginning, however, such a price rise was welcomed as it would benefit the farmer 'who had had a raw deal owing to drop in prices of agricultural produce since the slump of 1929.'<sup>33</sup> With the rise in prices of agricultural produce and reduction in the burden of fixed charges effected by the provincial ministries, it was now possible for him to pay off these fixed charges by selling less quantity of crop and retain more for his consumption. It was this reduction in the marketable surplus that had created the spiral of rising prices. The problem of prices is, therefore, connected with the marketable surplus rather than with the variation in production.<sup>34</sup> The rumours of huge exports and the fear of currency depreciation and the expectation of a further rise in prices led to stock building by consumers, traders and farmers beyond their normal requirements and were important factors in raising the prices from the short term point of view.<sup>35</sup>

Food situation, however, took an ugly turn with the fall of Burma in April 1942. Even before the Second World War, India had become an importer of rice and the major source of supply was Burma. The important fact to note in this connection is that there was an increasing trend of imports and rice imports in 1939-40 amounted to 1.8 million tons. Even in normal times imports would have further increased with the rise in population and improvement in the income of the farmers who had backlog of unsatisfied demand due to the effects of depression.

32. Volume of notes in circulation :

Year	Notes	Percentage rise
Aug. 1939	179	
" 1940	230	29
" 1941	277	20
" 1942	474	71
" 1943	755	60
" 1944	927	23
" 1945	1139	23

33. Henery Knight, *op. cit.*, p. 34.

34. Food-Grain Enquiry Committee Report, p. 44. (Ashok Mehta Report.)

35. Ashok Mehta Committee Report, *op. cit.*, pp. 40 and 48.

Against the background of developing critical situation there was the complacent view that as India grew 95 per cent of her requirements, the country could meet the emergency by proper transport arrangements.<sup>36</sup> Even with the fall of Burma, Government of India failed to take effective action and did not implement the recommendations of Foodgrains Enquiry Committee. There was lack of co-operation between different administrative units and speculators were able to exploit the situation to their fullest advantage. For example the price control instituted in respect of wheat in 1941 was abolished in January 1943 because adequate supplies were not forthcoming to the market. The failure of the price control was however due to the absence of any control on supply or demand.<sup>37</sup> In fact, what was needed was an effective co-ordination between price control, procurement and rationing.

The policy of the Government of India was in marked contrast with the policy followed by several other countries. In most countries of Europe, rationing was introduced before specific scarcities had time to develop and available supplies were equitably distributed.<sup>38</sup>

As a result, the Government failed to avert the critical food situation in Bengal in 1943. Failure of aman crop in 1943 and Midnapore cyclone caused shortfall in production at a time when Burmese imports were cut off. But the most important factor was the shameful lack of foresight and planning capacity by India's own civil governments—Central and Provincial.<sup>39</sup> The Bengal Famine took a toll of at least 1½ million human lives<sup>40</sup> and constituted one of the worst tragedies of the present century.

The Government appointed the Bengal Famine Enquiry Commission to find out the causes of the Bengal tragedy and suggest measures for improving the rural economy of the country and the role of the Government in future. It was the verdict of the Commission that it 'lay in the power of the Government of Bengal by bold, resolute and well considered measures at the right time' to have largely prevented the tragedy of famine as it took place and it was said with full understanding of the numerous and formidable difficulties and full appreciation of all that was eventually

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36. Speech of the President of a Third Price Control Conference quoted by Knight on p. 43.

37. *Food Situation in India—1939-53*, p. XXIV.

38. *Food and Famine Relief*, p. 1. League of Nations publication.

39. Durlab Singh (Ed.), *Bengal Tragedy*, p. 13.

40. The toll of human lives in Bengal Famine has been estimated differently by different authorities. According to Bengal Famine Commission 1.5 million people died while T.K. Ghosh and K.P. Bhattacharya estimated the loss of human lives at 2 million and 3.5 million respectively.

41. Report of the Bengal Famine Enquiry Commission, Bengal Report, p. 105.

done to overcome them.<sup>42</sup> The Commission came to the conclusion that the future problems of food supply and nutrition must be one of the primary concerns of Central, Provincial and State governments'.<sup>43</sup> A large increase in agricultural production could not be achieved without intensive and sustained efforts on the part of both government and the people.<sup>44</sup>

The Bengal Famine had, however, far reaching effects in respect of future food policy. The *laissez faire* policy was abandoned. The recommendations of the Foodgrains Policy Committee, 1943 were accepted. Rationing was introduced to ensure equitable distribution of existing supplies at control prices. By 1947, the population under rationing was 159 million in 887 cities, towns and rural areas. To meet the commitment under rationing, procurement operations were undertaken and efforts were also made to import foodgrains from abroad in as large a quantity as possible. A basic plan was formulated to allocate the available supply to deficit areas and 60 per cent of the available supply went to Bombay, Madras, Bengal, Travancore and Cochin which were deficit areas even during the pre-Second World War period.<sup>45</sup>

#### Grow More food Campaign

Apart from assuming responsibility for the equitable distribution of the available supply, Government also launched a 'Grow More Food Campaign' to increase the availability of foodgrains. Various committees were appointed to suggest measures for increasing the food supply. There was great anxiety to increase food production but the exhortations of the Central Government were not, however, backed by effective administrative action or financial assistance. The financial assistance provided up to 1947 by the Central Government for this purpose to provincial governments and institutions amounted to Rs. 82.4 million in the form of loans and Rs. 115.2 million in the form of grants.<sup>46</sup> The amount spent cannot by any stretch of imagination be considered adequate considering the task involved.

However, under the spur of high prices which the cultivation began to receive, agricultural production increased, and reached the peak level in 1943-34. Next year the acreage increased but the production slightly declined. Failure of monsoon and adverse weather conditions in several parts in 1946 and 1947 affected the output and the threatened famine could be kept at bay by importing foodgrains from abroad. The increased production was possible mainly by increasing the area under double crop-

42. *Ibid.*, p. 142.

43. General Report, p. 113.

44. *Ibid.*, p. 24.

45. *Food Situation in India*, pp. X and XVIII.

46. Proceedings of Central Legislative Assembly on August 16, 1948.

ping and reducing the area of fallow land. The following table<sup>47</sup> shows the area and value of the agricultural output.

<i>Year</i>	<i>Area (million acres)</i>	<i>Agricultural output at 1938-39 level of prices</i>
1940-41	328.2	8557
1941-42	320.6	8196
1942-43	331.1	8624
1943-44	337.6	9187
1944-45	346.5	8840
1945-46	338.7	8348
1946-47	334.0	8216

Judging the value of agricultural output for the period under review, we find that production was rather stagnant and productivity per acre was declining specially in foodgrains.<sup>48</sup> Even the very high prices of war years did not bring forth any substantial increase in production. In the face of rising population and stagnant production, it was no wonder that per capita consumption of foodgrains should have decreased.

The question arises as to why the food production did not respond to high prices and 'Grow More Food Campaign' specially when yield per acre in respect of wheat, cotton, rice, sugarcane, etc., was low in comparison with the yield in backward countries like China, Egypt, etc., not to speak of the advanced countries of the West. There was vast scope for improving the yields.

Increased production could be achieved by extensive or intensive cultivation. There was not much scope for bringing new area under plough because under the pressure of population not much area was left in the villages. Reclamation of jungle land and other culturable land required the use of mechanical appliances and huge finances which were beyond the means of cultivators. Government alone could undertake this job but was busy with the more important task of war-preparations, and therefore, did not pay adequate attention for reclamation of new areas. Intensive cultivation also required more inputs in the form of improved seeds, manures, insecticides, and better irrigation facilities. But the supply of these inputs could not be increased during the war years and tiller of the soil did not

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47. Figures in the Table have been taken from the article of Arora appearing in the book 'Papers on National Income Vol. I'.

48. Index of Productivity based on six selected crops compiled by D.S. Chauhan in his book, *Studies in Utilisation of Agricultural Land*, p. 93, shows that index (Base 5 yearly moving average 1911-12 to 1915-16=100) which stood at 109.2 in 1934-35 began to come down to 100 in 1940-41. Thereafter...it began to rise under the spur of high prices and after reaching war-time peak of 103.6 in 1944-45 came down to 101.6 in 1946-47.

command enough resources required for the application of these inputs. Food production, therefore, failed to reach the expected target despite attractive prices.

After the depression, Government did not spend any significant amount on the extension of irrigation facilities. Projects initiated in the pre-depression were alone completed. Had Government launched some new irrigation works during depression, not only it would have stimulated the economy during that period but such facilities would have proved very handy in meeting the food shortage. Area under irrigation increased from 55.8 million in 1940-41 to 57.5 million acres in 1945-46 mainly by the better utilisation of existing facilities and extension of well irrigation to a certain extent. There was, therefore, not much increase in irrigation which is *sine qua non* for increased agricultural productivity.

The progress in the distribution of improved varieties of seeds was far from satisfactory.<sup>49</sup> Even after four decades of their existence, the Agricultural departments felt the necessity of demonstrating on wide scale the efficiency of improved seeds is a clear pointer that not much effort was made in popularising the improved strains. Given a suitable organisation, the entire area could be brought under improved strains in a period of 5 to 10 years. During the war years, additional quantity of seed to cover an area of 4 million acres was produced but was not of requisite standard.

Further, the adoption of improved seeds alone could not bring about increased production. Little success was achieved in increasing the production and application of various types of manures.<sup>50</sup> The soils could not recuperate the loss of fertility due to scarcity of manures. Bengal Famine Commission, therefore, rightly remarked that isolated attempts to popularise high yielding varieties without making provision for other factors could not achieve the desired result.<sup>51</sup>

If full benefits of irrigation, manuring and improved varieties of seeds were to be reaped, it was equally essential to protect the crops from diseases, pests and vermin. But the cost of fungicides, insecticides, fumigants and appliances were beyond the means of cultivators. There was also the diffi-

**49. Percentage Area Under Improved Seeds**

<i>Commodity</i>	1926-27	1938-39
Rice	1.1	6.2
Wheat	11.9	22.4
Jowar	.5	1.1
Groundnut	10.3	6.0
Gram	.8	1.6
Cotton	22.7	27.5
Jute	13.1	50.2
Sugar	1.2	68.2

*Vide* p. 152 of the Report of Bengal Famine Commission.

50. Report of Famine Inquiry Commission, Bengal, p. 16.

51. *Ibid.*, p. 159.

culty of obtaining adequate supplies of steel for replacing and making agricultural implements and machinery. Tractors and other agricultural machinery could not also be provided to the cultivators. Acute shortage of building materials and steel hampered progress in increasing the irrigation facilities by sinking new wells.

Adoption of intensive cultivation involving more inputs required more capital. Expecting improvement in agricultural productivity without adequate investment in agricultural inputs was expecting the impossible. Majority of the farmers did not have adequate capital for carrying out agricultural improvements. Net capital formation as a percentage of net agricultural income was 1 per cent between 1940-41 to 1945-46 as against 2.83 per cent between 1935-36 to 1940-41.<sup>52</sup> Landlords were also not interested in investing capital because they could realise increasing rents on account of the growing pressure of population.<sup>53</sup>

In the sphere of agricultural research not much work was done despite the establishment of Indian Council of Agricultural Research. Government did not possess suitable organisation to communicate the result of research to the farmers. The work of agricultural departments was much below the mark. Government never spent adequate funds on the development of the departments. The staff was inadequate to deal with the large development schemes and demonstrate to the farmers about the new methods of production, new varieties of seeds and give all facilities and guidance to the farmers for increasing the productivity of the land. In the depression, axe of economy had fallen more severely on development departments and the staff was reduced to a skeleton. Again during the war period adequate attention was not given for strengthening the staff of the agricultural departments so that they could play proper role in alleviating the food shortage. Moreover the agriculture departments were pursuing a narrow ideal of technical improvement. The departments should have been imbued with a spirit of searching inquiry into the various causes of poverty and take a comprehensive view of the problems before them; which unfortunately they did not.<sup>54</sup>

Moreover, agricultural efficiency did not depend merely upon technical perfection of implements and soil but was as much determined by the 'social, economic and legal status of the cultivator'. Despite the successive provisions of the Tenancy Acts, a large and increasing proportion of the actual cultivators had no part of the elements of ownership, no protection against the excessive rents and no security of tenure.<sup>55</sup>

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52. Tara Shukla (Mrs.): *Capital Formation in Indian Agriculture*.

53. Wilfred Malenbaum, *op. cit.*, p. 137.

54. Minute of Dissent by Nanavati in the report of the Bengal Famine Commission, p. 371.

55. *Ibid.*, p. 366.

In view of the aforesaid reasons, the agricultural production did not rise significantly even under the influence of high prices. There is not much truth in the views of Taxation Enquiry Commission that there was slackness of effort on the part of farmers because with inordinately high prices, they could maintain their customary standard with a little less production.<sup>56</sup>

The facts of the situation however are that the Government did not follow effectively the recommendations of the various Famine Commissions both in letter and spirit. The reports of the Famine Commissions 1880 and 1901 were very comprehensive. The usefulness and suitability of their recommendations and suggestions continue to hold good even to this day. The Famine Commission had visualised an agricultural economy in which the cultivator would have enough land and full incentive to put in his best efforts and government would render him all possible help—financial and technical—in improving the productivity of soil. They had specially recommended the development of industries for withdrawing surplus population and irrigation facilities and other perquisites necessary for efficient cultivation. As regards the funds, part of the finance was to be provided by the Government and a part was to be saved by the farmers.

A new era of agricultural development was initiated during the Viceroyalty of Lord Curzon but the pace of development did not gather any momentum. Only piecemeal measures were taken in a half hearted spirit. As the fear of famine receded, efforts were slackened and during the depression period the problems of agriculture were relegated to the background. Had Government paid adequate attention to the problems of agriculture at that time the country would not have faced acute food-shortage during the war years. The heavy toll of human lives and the deteriorating food situation during the war period inculcated upon the Government the need for improving agriculture. But on account of the preoccupation of the war and other reasons, Government could not devote adequate attention to the development of agriculture. Any way, the war-time shortages made Government more conscious of its responsibilities and it behaved well for the future.

### Economic Position of the Cultivator

There are no comprehensive data to show the effect of rise in the prices on the various categories of cultivators but there are certain indications which point out that the economic position of the farmer improved and was better than at the end of the previous period. Reduction in the amount of indebtedness, fall in the business of land mortgage banks and rise in land values point out that the financial position had taken a favourable turn. Reduction of rent in some provinces was a measure which fav-

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56. Report of the Taxation Enquiry Commission, Vol. I, p. 159.



ourably affected the cultivator and in any case he could meet this claim by selling a much smaller quantity of land because of the rise in prices. His position had taken a favourable turn only after 1942 and on the whole there were good harvest between 1942 and 1945. During this period there was correspondingly greater increase in agricultural prices in relation to the prices of commodities consumed by the cultivator.<sup>57</sup> But on the positive side of savings which were needed for effecting improvements in agriculture, majority of the provincial governments were of the opinion that the farmers were not able to develop saving habit appreciably,<sup>58</sup> but the habit was slowly developing. In 1946 and 1947, the production was affected on account of the failure of monsoon and they were compelled to withdraw from their savings.

The extent of the benefit of rising prices, however, depended upon the marketable surplus; only big and medium class cultivators who had enough marketable surplus were in a prosperous condition. The condition of small holders did not improve; on the other hand, condition of landless labourers deteriorated.<sup>59</sup> Their wages did not rise in proportion to rise in prices and in rural areas they were unable to get foodgrains at controlled prices. Moreover, there was tendency to substitute cash wages for wages in kind. The growth of industry and military recruitment did not mop up the entire surplus labour. A considerable section of the rural population mainly consisting of landless labourers could not boast of even two most ordinary meals a day.<sup>60</sup>

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**57. July-September**

*Foodgrains**Other articles required  
by the cultivators*

1939	105	104
1940	104	112
1941	120	150
1942	160	185
1943	234	256
1944	266	238
1945	255	219
1946	282	232
1947	260	233

58. Vide Appendix 7 of the Report of the Bengal Famine Commission.

59. A study conducted by Narain Swami Naidu in Madras (reported in the *Eastern Economist* of January 28, 1948) showing the effect of Second World War on farmers concludes that the total rural indebtedness had fallen by Rs. 54 crores between 1939 to 1945. But on the whole agricultural sector did little net saving during the war years. Big landlords and medium cultivators were able to save more but the position of small landholders, tenants and landless labourers deteriorated during the war period.

60. A very informative and illustrative account of the conditions of the rural masses is given in N.P.C. Sub-Committee Report on Crop Planning and Production.

## CHAPTER VI

### CONCLUSION

#### (A Critical Appraisal of Economic Development Between 1914-1947)

The story of more than 3 decades of development which we have reviewed in the previous chapters does not reveal any marked progress; it rather clearly brings out stagnation or slow deterioration in the economy. This period has been described by one foreign economist as "the period of political transition and economic stalemate."<sup>1</sup>

A marked feature of the period under review was the rising trend of population especially after 1921. Not only did the population show an upward trend but the rate of growth was greater in every subsequent decade. The population recorded a growth of 20 per cent in 50 years preceding 1921 whereas there was 27 per cent increase in the next 20 years and despite Bengal Famine and war casualties it continued to increase at the rate of 1.25 per cent from 1941 onward.<sup>2</sup>

The growth of population unlike advanced industrial countries was not a consequence of rising incomes and living standards but was mainly the result of the reduction in death rates on account of improved public health measures against epidemics, the development of maternity and child welfare services and the improvement in the treatment of hospital patients, etc.<sup>3</sup>

Against the rising trend of population the area under cultivation did not increase in the same proportion and showed an increase of a little more than 10 per cent only. The quinquennial average for the year ending 1946-47 was 338 million acres as against 305 million acres for the year ending 1914-15.<sup>4</sup> Thus the availability of land per capita continued to decline which is clear from the following table.

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1. Halen B. Lamb; Article on 'India: A Colonial Setting', p. 465 in the book, *Economic Development Principles and Pattern*, edited by H.F. Williamsons and J.A. Buttrick.

2. B. Dutt, *Economics of Industrialisation*, p. 165.

3. Report of the Famine Commission 1945, Chapter I, Part II, p. 90.

4. Calculated on the basis of figures given in the Article of Arora on p. 244 in the book, *Papers Relating to National Income*, Volume I.

Cultivated Land Per Capita<sup>5</sup>

Year	Acres
1911	1.09
1921	1.11
1931	1.04
1941	.94
1951	.84

The worst feature was that the production did not keep pace with the increased acreage. In fact, the productivity of land per acre was declining. The gross value of output at 1938-39 level of prices for the quinquennium ending 1914-15 at Rs. 8,109 million showed an insignificant increase and reached Rs. 8,644 million in 1946-47. The index of output at 112.5 (Base year 1938-39=100) for the year 1910-11 was higher by about 6.3% than the figure of 106.2 for the year 1946-47. Despite high pressure of population land resources were not fully utilized. Only about one-sixth of the area was double cropped while a much greater area could be sown with 2 crops in a year provided water and fertilizers could be made available. Similarly a considerable area had to be left fallow for recuperating the fertility. There was no need to leave the land fallow if suitable rotations of crops could be introduced and adequate fertilisers provided.<sup>7</sup>

The above data clearly brings out the deterioration in agricultural incomes and decline in the standard of living of the cultivators.

The farmers were specially hit hard during the depression when the prices of agricultural produce were reduced by 50 per cent and they had little income left with them to support their families after the payment of fixed charges. Their standard of living reached the lowest ebb and in fact they had to live on their savings and capital. They had not only to part with their savings and ornaments but had also to sell a portion of the land to satisfy the debts.

It must not, however, be supposed that productivity of all crops was stagnant. Productivity per acre showed a constant increase in case of cotton, oilseeds, sugar and tea. As regards jute, productivity increased in the

5. The data relate to "Indian Union Census of India", Volume I, Part I-A, p. 141.

6. Article of Arora, *Ibid.*, p. 241 (Figures relate to undivided India).

7. Area available for cultivation in 1936-39—

Uncultivated area	112	million acres.
Fallow	59	" "
Sown once a year	244	" "
Sown twice a year	36	" "

Source : "The Economic Consequences of Divided India", page 153 by Vakil.

beginning but declined at the end of the period. The greatest progress was recorded in case of tea cultivation. Between 1913-14 and 1946-47 the area under tea cultivation increased by 50 per cent while production almost doubled. Production of cotton, jute and oilseeds was adversely affected during the war period on account of the stoppage of exports to enemy countries.

As against the bright performance of cash crops the production of foodgrains declined. Decline was particularly marked in rice and inferior cereals, while the production of wheat showed a slight increase at the end of the period. The following table shows the production of some crops during this period in 4 provinces.

Table showing Production of some Crops in Lbs. Per Acre<sup>8</sup>

<i>Province</i>	<i>Year</i>	<i>Rice</i>	<i>Wheat</i>	<i>Jowar</i>	<i>Cotton</i>
Madras	1910—15	877	..	444	46
	1920—25	1012	..	616	73
	1940—45	1039	..	559	80
Punjab	1910—15	..	758	..	96
	1920—25	..	725	..	117
	1940—45	..	806	..	153
U.P.	1910—15	656	879	485	..
	1920—25	584	815	470	..
	1940—45	539	784	508	..
M.P.	1910—15	701	550	572	79
	1920—25	565	559	512	80
	1940—45	566	373	492	85

It would be clear from the above table that the standard of cultivation was much better in irrigated tracts of Madras and Punjab. In Madras rice yields not only showed a constant increase during the period but also were double of that of U.P. and M.P. Similarly there was a marked upward trend in cotton and wheat yields in Punjab.

However, the output per acre in cotton, rice, wheat, etc., remained low and there was very considerable gap in the average yields in India and other countries.<sup>9</sup> The country was unaffected by the vast amount of technological improvements that had taken place in Europe, America and Australia. Use of efficient machinery, new varieties of seeds, fertilisers and insecticides and improved techniques had brought about so vast an improvement in agricultural production that the world was faced with an

8. V.G. Panse: *Studies in Agricultural Economics*, p. 67 quoted by Wilfred in his book on p. 124.

9. *Courses and Phase of Depression*: League of Nations.

over-production of food grains and agricultural raw materials.<sup>10</sup> As a result less number of people were able to produce greater quantity in all these countries, e.g., in Japan 61.5 per cent people were employed in agriculture in 1912 but by 1954 only 44.5 per cent people were employed in agriculture. In U.S.A. 12.2 per cent population (1950)<sup>11</sup> could produce not only enough for the whole country but had an exportable surplus. The U.S.A. was able to transfer a substantial section of her population from agriculture to other occupations without any detriment to agricultural production. While in our country more than 70 per cent population failed to produce sufficient quantity of foodgrains for the whole country.

The history of all agriculturally advanced countries clearly points out the diminishing importance of agriculture in the occupational pattern over a period of time.

One remarkable feature has been, that though the farmer had been conscious of the world demand for his production and tried to adjust production to the demand but was unconscious of the improvements that had been taking place in the methods of agricultural production elsewhere. We can note the fluctuations in the production of cotton and jute in response to rising and falling prices reflecting the demand for such commodities and increase in the production of oilseeds and sugar in response to rising demands. But on the whole farm output has been inelastic in response to changing prices because of the peculiar circumstances under which farming is carried on. Farmers respond by expanding output when the demand is falling in the hope that with falling prices and increased output the same aggregate return might be obtained.<sup>12</sup> Further, there were no alternative occupations to which the farmers could shift at such a time.

There were several reasons for rural stagnation. First of all the rural India was lacking the dynamic leadership which was necessary to bring about improvement in agricultural methods and technique. The elite of the countryside consisted of persons who had absolutely no interest in making agricultural improvements. Gains to the landlord were assured because of the rising rents on account of greater pressure of population on land. He had, therefore, no incentive to make improvements in land. Further, social customs and organisations were such that it was considered derogatory by higher classes (e.g., Brahmins and Thakurs) to cultivate the land personally. They, therefore, did not like to send their sons for agricultural education who could take to agriculture and demonstrate the effects of better methods. Besides, like his English counterpart, landlord in India did not like to invest capital in agriculture and did not exhibit

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10. *Courses and Phases of Depression*: League of Nations.

11. *Economic Development—Theory, History and Policy* by Meir and Baldwin, p. 478.

12. N.A. Khan, *op. cit.*, p. 94.

any interest in the way his tenants carried out the cultivation. He was merely concerned with exacting as high a rent as possible and with the growing pressure of population on land it was easy enough for him to exact more rent. Even many ambitious cultivators aspired for a day when they could have enough land so that they could live on its rental income.

On the other hand, the actual tiller of the soil neither had the incentive nor the means to carry out the improvements. There was no security of tenure, rents and assurance that the benefit of improvements will be solely enjoyed by the tiller of the soil. "The threat of separation worked to reduce both his bargaining power as to the share of the crop and his interest in the long period investment in an asset from which he could be separated."<sup>13</sup> Of course, attempts were made in this period to provide greater security of tenure and fix rents on reasonable basis. But still there was a considerable number of share-croppers on the land.

Apart from the nature of tenures, most of the farmers did not have an economic holding which would provide enough income not only for their maintenance but leave surplus for carrying out the necessary improvements. In fact, they had to borrow money even for maintenance whenever the rains failed or the prices became low. The loans from money-lenders could be obtained only at usurious rates of interest and it was also not easy to obtain loans from the Cooperative Societies which were neither fairly wide-spread nor had adequate resources to finance improvements. As Tawney had correctly observed: "it would be futile to preach doctrine of agricultural improvement to cultivators so impoverished by the exactions of parasitic interests that they do not possess resources needed to apply."<sup>14</sup>

Further, owing to the slow growth of urban industries, rural craftsmen could not be fully absorbed in them. It was estimated by the Census Commission of 1931 that 67 per cent of such displaced persons took to agriculture and allied pursuits. Such persons did not possess the adequate know-how for agricultural operations and were further responsible for depressing efficiency in agriculture.

Besides, owing to his illiteracy and ignorance the farmer did not possess knowledge of the new methods of agricultural production. Further, in the absence of surplus income he could not take risk in experimenting with the new methods of cultivation.

Physical and social environment had brought about an attitude of fatalism in him and he did not put in his best efforts.

Another notable feature of the period was the rapid pace with which land was transferred from the tillers to the money-lenders. The process was specially marked after the depression. The money-lender himself did not take to cultivation of the land that came to his possession but merely

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13. *Ibid.*, p. 130.

14. Quoted by Nanavati in his book on p. 361.

let out to other tenants on a year to year basis who had no incentive to put forth their best energy. Thus, the efficiency of land was further depressed.

As for the Government action for improving productivity of agriculture, it can be said without any fear of contradiction that not enough was done to put the nation's agriculture on a sound footing. Policy of agricultural betterment initiated during the regime of Lord Curzon received less and less attention as the years passed. Government attention, in the main, was devoted to providing canal irrigation facilities (in Sind, Punjab, West U.P. and Madras), encouraging the growth of credit cooperatives and security of tenures in zamindari provinces. Government demands of land revenue, of course, were not increased to any significant extent and suspensions were made in times of need. Provision for irrigation was a step in the right direction and it did stimulate agriculture in Sind, Punjab, West U.P. and Madras in canal areas, but nothing was done to encourage other forms of irrigation. For political reasons the Government failed to abolish the zamindari system and provide itself with additional revenues for agricultural improvements even when it was perfectly clear that zamindars unlike their English counter-parts performed no useful function in rural society. They were merely rent collectors and cause of unnecessary litigation in rural areas. The cooperative movement failed to make much headway and covered only a small fraction of the rural population within its purview. The Government failed to provide substantial funds at cheap rates through cooperatives to country-side for effecting agricultural improvements. It was thought that enough funds would be forthcoming for meeting the requirements from within the countryside. Further, the rural problem was not correctly diagnosed. It was not simply the problem of rural credit but of deficit agriculture. The main problem was that under the system of given techniques, the farmer was unable to earn substantial income for meeting even his minimum requirements overtime and had, therefore, to borrow either when the crop failed or when some other contingency arose. The emphasis, therefore, should have been on giving him an economic holding and providing him with the necessary facilities for carrying on agriculture in an efficient manner and in getting reasonable price for his produce. For this purpose co-operation should have covered all facets of agriculture and since the pressure on land was great, he could have been encouraged to take up some subsidiary occupations.

The crucial time for judging, whether the Government had the welfare of rural masses at heart, came at the time of depression. The Government failed to take any worthwhile step to maintain the income of agriculturists and to provide enough finance to tide over the period of crisis. Government policies were in marked contrast with the policies followed by other countries in supporting the agriculturists at such a critical juncture. It was not until the food shortage appeared during the Second World War

that it dawned upon the Government to follow such policies that would encourage the growth of foodgrains to meet the whole requirement.

Until the recurrence of Bengal Famine, public opinion was also none-too-favourable for improving agricultural yields. Of course, the poverty of rural masses during and after the depression did attract some attention but the ideal of efficient agriculture did not command a very wide support so long as food was available at cheap rates and could be imported from other countries, the deteriorating food production did not evoke any attention.

Industrial development was considered to be the sole remedy for improving the general economic condition and therefore greater emphasis was placed on the need for industrial development and agriculture was neglected.

No longer was it realised that rationalisation of agriculture and expansion of industrialisation were closely inter-related and should have been planned on a coordinated basis.<sup>15</sup> Modern economists are now agreed that rationalised agriculture is a sine-qua-non of industrial development. Agriculture should not only provide increased food production but must yield a substantial surplus for industrial development. Further, the environment of rising rural incomes should provide an important stimulant to modern industrial sector for faster growth.<sup>16</sup>

## INDUSTRY

Before summarising the essential changes that took place in the industrial sector, we must point out that the approach to industrial development was different from the modern approach. The aim of industrialisation in the beginning of the 20th century was reducing dependence on imports and substituting of national enterprise in place of foreign enterprise. Japan was considered to be the model worthy of emulation. Industrial Commission adopting this approach emphasised the need for making the country more self-contained in respect of man and materials.<sup>17</sup> There was very imperfect realisation of the real importance of industrialisation.<sup>18</sup> During the inter-war years, the problem of industrialisation was approached piecemeal through tariff protection, and there was no conscious change of perspective and approach. It was only during the closing years of the Second World War, that there was very marked change in the manner of approach. The Keynesian 'employment and income approach' began to dominate

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15. Fiscal Commission 1949-50, p. 87.

16. Rostow: *Stages of Economic Growth*, pp. 522-28, and also N. Kaldor's book, *Essay on Economic Development*, p. 239.

17. Report of Industrial Commission, 1916-18, p. 3.

18. B. Datta: *Economics of Industrialisation*, p. 3. This para contains a summary of ideas given on pp. 1-8.



thinking and India is no exception to this approach. Industrialisation is considered necessary for making fuller employment of the available resources with a view to raising the level of incomes, and special emphasis is laid on reducing excessive pressure of population on agriculture. National Planning Committee appointed by the All-India Congress Committee also advocated the idea of an all-round simultaneous continuous programme of controlled growth to pre-determined goals in every field.<sup>19</sup> This new approach has led to the adoption of development planning in our country.

At the beginning of First World War, large scale industry gave employment to about a million workers most of whom were employed in cotton, jute, collieries, railway and other engineering workshops. Iron and steel industry had also just made its appearance on the scene. Jute and plantations mainly catered to the foreign markets and substantial quantities of yarn were also exported to other Asian markets. Jute, plantations, mines and paper industry were mainly financed by foreign capital. Indian capital was playing a modest role and was mainly employed in cotton mills, ginning presses and rice and flour mills. There was considerable scarcity of top managerial skill in the country and in several Indian owned cotton mills foreigners had to be employed on top executive posts.<sup>20</sup> In TISCO works almost all top managerial posts were occupied by the foreigners. The country was dependent for most of its requirements in respect of consumer goods, machinery, mill stores and chemicals on foreign imports.

First World War by cutting off foreign supplies dramatised the need for developing industries in the country to avoid all such future contingencies. Existing industries made record profits and there was mushroom growth of new factories majority of whom had little chance of survival on the re-appearance of foreign competition. The Government also realised the need for industrial development of the country.

With the exception of jute industry which did not exhibit very marked expansion, all the existing industries, i.e., cotton, iron and steel, paper, etc., showed substantial expansion. Cement industry which was started during the war also witnessed very substantial growth despite the denial of protection. New industries like sugar, match, sulphuric acid, etc., also made their appearance during the inter-war period and made rapid strides. By the end of the period under review India ranked as the 8th industrial country of the world and had emerged as one of the leading exporters of cotton textiles in the world.<sup>21</sup> Self-sufficiency was reached in respect of cement, match, sugar and woollen textiles; major portion of demand for

19. N.P.C. Sub-Committee Report on Manufacturing Industries, p. 22.

20. Information based on 1911 Census Report.

21. *Process and Problems of Industrialisation in Under-developed Countries*, p. 142. U.N. Publication.

paper, iron and steel, glass, etc., could also be met from the internal production.

However, at the beginning of the Second World War the country was dependent for machines, machine tools, millstones and chemicals, dyes, medicines, etc., on imported supplies and the danger of such dependence was again most vividly brought out during the war years when the foreign supplies were either cut off or seriously curtailed.<sup>22</sup> It became difficult even to maintain production even in existing industries. Replacement needs had to be improvised and no substantial change could be effected in the basic structure of industries.

Despite approximately three-fold increase in the number of factory workers and four-fold increase in the factory production we must not reach the conclusion that India had made rapid strides in industrial advancement.<sup>23</sup> Even with this rapid progress factory and mining establishments employed 2.8 per cent of the total working force and generated 7.1 per cent of the net output in 1948-49.<sup>24</sup> There was absolutely no change in the occupational structure and the same percentage of workers was employed in industry as at the beginning of the period.<sup>25</sup> Thus "the expansion of new industry was smaller than what the economy needed to absorb displaced handicraft workers and to offset decline in agricultural output—to say nought of what was needed to generate rapid overall growth."<sup>26</sup>

At the beginning of the period under review a very substantial part of the manufacturing capacity was centred around the port towns of Calcutta, Bombay and Madras. New units in cotton textiles began to shift to upcountry centres. Sugar industry was mainly confined to U.P. and Bihar. New units in paper and other industries also began to shift to other upcountry centres. Units in cement and match industries were also started away from the port towns. A few more cities like Ahmedabad, Kanpur, Jamshedpur, Nagpur, Sholapur, etc., had gained industrial importance. But even so a major part of the manufacturing capacity was confined to the provinces of Bengal and Bombay and rest of the country did not experience enough impact of this process of industrialisation.

Another remarkable feature of the development was the diminishing importance of foreign capital. Foreign capital did not extend its interest

22. Evidence of Bengal National Chambers of Commerce, Calcutta before Fiscal Commission 1949-50.

23. Number of industrial establishments increased from 4.3 thousand in 1911 to 14.6 thousand in 1947, *vide* U.N. Publication, p. 133, already quoted.

24. *Ibid.*, N.A. Khan, *op. cit.*, p. 172.

25. According to 1911 Census Report only 11.9% population was dependent on industry whereas according to 1951 census only 10.8% persons were dependent on industry.

26. Wilfred, *op. cit.*, p. 152.

to the new industries that were started but concentrated its control on jute, plantations, mines and engineering workshops in the Eastern region. Even in these industries Indian nationals began to acquire more share and during the period of Second World War many foreigners had sold their interests to their Indian counterparts. The Marwari community had acquired a dominant role in the modern industrial sector.

Before the Second World War, British nationals dominated the industrial sector beyond the range of their investments and were able to earn substantial profits by charging excessive commission for managing agency services and employing foreign personnel on all top executive posts. For example by the 1920s majority ownership of jute mills had passed to Indian hands but mills were still controlled by British managing agents.

According to modern view in countries like India the process of industrialisation could be regarded well under way only when industry, transport, etc., absorb more than the whole increase in population. The table given in the foot note<sup>27</sup> shows that India did not satisfy that criterion and increasing number of persons had to depend on agriculture for their livelihood.

In contrast, countries like Poland and Hungary were not only able to absorb additional increment in working force in non-agricultural occupations but were also able to transfer a portion of existing labour force from agriculture to non-agricultural occupations in a period of 10 years (1920-30). In Australia, New Zealand and Yugoslavia greater proportion of additional working force began to be absorbed in non-agricultural occupations.<sup>28</sup>

Though the country was slightly able to increase her share in world's manufacturing from 1.1 per cent to 1.4 per cent between 1913 to 1938<sup>29</sup> but the increase on per capita basis was much less as compared to U.S.A., Germany and Japan as would be clear from the following table:

27. Co-efficient of industrial Absorption of population in India  
(Source: *Process and Problems of Industrialisation in Under-developed Countries*, p. 139).

Period	Annual increment in		Ratio of industrial employment incre- ment (per cent)
	Population (000)	Industrial Employ- ment (000)	
1911-1921	1,200	40.0	3.3
1921-1939	3,302	25.0	0.8
1939-1945	3,365	150.0	4.5
1946-1948	3,072	228.0	0.7

28. Colin Clark: *Conditions of Economic Progress*, p. 453.

29. Both figures have been taken from League of Nations Publication, *Industrialisation and Foreign Trade*, pp. 13 and 18.

**Approximate Manufacturing Per Head of Population<sup>30</sup>***(In Dollars at 1926-29 Prices)*

<i>Period</i>	<i>U.S.A.</i>	<i>Germany</i>	<i>Japan</i>	<i>India</i>
1911-13	250	170	16	2.5
1926-29	350	180	41	3.5
1936-39	330	210	65	4.9

**FOREIGN TRADE**

Foreign trade of a country also reflects the changes that take place in the economy of a country and the effect of changing economic conditions of the world. At the beginning of the First World War, we were mainly exporting foodstuffs and raw materials, like wheat, cotton, oilseeds and jute and the processed goods based on agricultural produce, e.g., tea, cotton and jute manufactures in exchange of cotton manufactures, metals, machinery and equipment of all kinds, sugar, mill stores and other consumer goods. During the war period our imports were reduced to the barest minimum on account of the pre-occupation of supplying countries with war and scarcity of shipping space. The composition of foreign trade was also affected because of the stoppage of exports to enemy countries but on the whole the reduction in the volume of exports was less than that of imports. After the war was over, both the exports and imports began to take rapid strides. Exports reached the post war peak in 1925-26; thereafter there was a mild fall up to 1929-30. Then came the world depression and there was a steep fall in the exports. This affected our ability to finance imports from abroad. During the post-depression period, the country became an exporter of gold. Terms of trade also became unfavourable, i.e., there was greater fall in the prices of export articles in relation to the fall in the prices of imported articles. Forces of recovery began to exert their influence from 1932 to 1933 resulting in increasing exports and imports. But the volume of trade could not reach the pre-depression level until the beginning of the Second World War. Again the experiences of First World War were repeated. Of course, this time, we were better prepared and were not only in a position to meet our internal requirements of consumer goods but also to meet a portion of the demand of the neighbouring countries of Asia and Africa. The country emerged as one of the biggest exporters of cotton textiles in the world.

Due to development of indigenous industries, our import requirements of consumer goods were wholly or very substantially met from indigenous sources but on the other hand imports of machinery of all kinds, chemicals, dyes, mineral oil and long staple cotton increased. Another feature was

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30. *Ibid.*

that the country became a net importer of foodgrains because of the increase in population and failure of foodgrains output to meet the country's requirements. Greater proportion of our exports consisted of articles of wholly or mainly manufactured goods. Exports of tea continued to increase unabated throughout the period but the raw cotton and jute had a chequered career and their exports declined during war period. Export of oilseeds which exhibited an upward trend during the inter-war years declined during the period of the Second World War.

Another remarkable feature of the trade was that the country never had a balance of payment crisis unlike some of the European countries; though, of course, imports were regulated during the Second World War on other considerations.

As regards the direction of trade, exports increasingly went to Commonwealth countries while our dependence for imports on Commonwealth countries showed a declining trend. Thus the trend of pre-first war period was reversed.<sup>31</sup>

In brief, the country had a "traditional society" which has been defined by Rostow as one where ceiling existed on the level of attainable output per head either because the potentialities which flow from the modern science and technology were not available or not regularly and systematically applied.<sup>32</sup>

### Reasons for Inadequate Development

Explanations for inadequate and lop-sided development of the industries lie partly in the apathetic attitude of the Government, scarcity of vigorous entrepreneurial leadership, scarcity of managerial and technical skills, low productivity of labour, failure of the industry to mobilise domestic savings into investment channels, and old fashioned inert social organisation and partly into external circumstances of the world depression which not only reduced the purchasing power of the rural masses but also dampened the enthusiasm of the investors.

### Government Attitude

There is abundant literature in the country which pinpoints the indifferent and apathetic attitude of the Government for promoting industrialisation in the country, and it is now recognised the world over that a colonial power cannot look to interests and aspirations of the people of its colonies, specially when they are in conflict with interests of its own citizens.

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31. On the basis of average figures of pre-war years of 1909-10 to 1913-14 over 70% imports came from Commonwealth countries while we export only 42% of our goods.

32. *Stages of Economic Growth* by Rostow, pp. 4-5.

Shortage of essential supplies during the first war convinced the Government of filling the gaps in the country's economy and Government responded to public pressure by appointing an industrial commission which made valuable recommendations for promoting industrialisation in the country. Soon after the war, industry, agriculture, cooperation, etc., were transferred to provinces under the Reforms Act of 1919. The Central Government, however, had the power to declare the development of any particular industry under its own control. But, this power was never invoked until the Second World War. Under the exigencies of war situation, the Central Government took control of all the major industries and a separate department for industries was created at the centre in 1943.

Naturally this arrangement was not conducive to the growth of industries. Provinces neither had enough finance nor the technical competence to carry out the programme to a successful fruition. Furthermore, co-ordinated and integrated planning in development of industries was impossible under that arrangement.

The Tariff Policy of the Government could not also achieve the desired results. There was a time lag in granting protection to industries. The protection was not conceived as an instrument of industrialisation but merely allowed existing industries to withstand foreign competition. Besides, a number of other measures recommended by the Fiscal Commission of 1920 were not given effect to. An element of Imperial Preference was introduced within protection without any quid pro-quo. Such a policy could not encourage the growth of new industries and was hardly appropriate to meet the requirements of industrial development of an under-developed economy.<sup>33</sup> Further, measures were not taken to secure efficiency in protected industries.<sup>34</sup> Need for Government regulation and control in protected industries for securing the desired growth in suitable areas and for securing protection at the lowest possible cost was also emphasised by the members of Legislative Assembly even at the time of granting protection.<sup>35</sup>

It was, therefore, rightly remarked by Buchanan that "the encouragement of industry requires a far reaching unified Government policy concerning not only raw materials and methods of production but markets as well. In fact, it must be associated with educational policy and almost every other great national interest."<sup>36</sup>

33. Evidence of Indian Merchants' Chamber, Bombay, before Fiscal Commission 1949-50, reported in Volume II.

34. Evidence of Khoj Parshad, Calcutta, before the same Commission.

35. Speeches of Thompson, K.P., and Joshi, N.M., on Cotton Tariff Amendment Bill, 1934 in Legislative Assembly in this connection are worth noting.

36. Buchanan: *Development of Capitalistic Enterprise in India*, p. 464.

To the misfortune of our country, there was not even a Central Bank until 1935 to regulate the credit and banking system in the interest of promoting the growth of economy. In fact, it was only during the Second World War that the Government was convinced of the need for adopting a positive approach for promoting the growth of industries and appointed various panels to fix targets for various industries and recommend the necessary measures for achieving those targets. Even so the new policy announced by the Government in 1935 did not approach the problem from the point of view of an all round comprehensive, coordinated development of all the resources of the country but rather tried to meet the immediate needs and deficiencies that the war had revealed.<sup>37</sup> The results of British policy in India were not impressive.

The attitude of the Indian Government was in marked contrast to the attitude of the Government of countries like U.S.A., U.K., Germany, Japan, etc. It has been rightly observed that "Although the general economic policies adopted differed widely, all of them were designed to give high priority to the goal of economic development."<sup>38</sup> Suitable policy for a densely and under-developed country has been laid down in the following words, "Deliberate Government action, going far beyond the simple measures, such as protective tariffs then employed, is called for not only to initiate and support industrial growth but to regulate its scope and pace and integrate it with broad programmes of social welfare."<sup>39</sup> India could not industrialise following British pattern and Japanese model would have been more suitable.<sup>40</sup>

In fairness to the Government it must, however, be said that attempts to raise revenue from public met with bitter opposition because of distrust in the Government. Government revenue, therefore, remained more or less constant between 1920 and 1940. (Actually there was a slight decline from Rs. 2,068 million to Rs. 2,050 million in this period). It could not also adopt measures to check population growth.

In short, the Government did not have a positive policy for promoting industrialisation despite its professed assertions and was merely busy with border wars on the north-west frontiers and suppressing the movement for the liberation of the country that was in full swing during the inter-war period. It failed to infuse confidence in the Indian business community and public by its policies and actions.

Another factor that impeded the growth of industry was the scarcity of vigorous entrepreneurs oriented not towards larger profits at existing

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37. N.P.C. Sub-Committee Report on Manufacturing Industries, p. 34.

38. *Ibid.*, Meir and Baldwin, p. 460.

39. Industrialisation and Foreign Trade.

40. *Indian Industry and Its Problems*, Vol. I, pp. 338-39 by H.R.

levels of output and technique but to expanded output under a regime of regular technological change.<sup>41</sup> Entrepreneurs for modern industry emerged from the trading and speculative class, who were unable to change their outlook. Indian capitalists cared more for immediate profits and industry came to be dominated too much by financial considerations and too little by industrial factors.<sup>42</sup> Because of this complex, they failed to conserve profits during the period of the First World War and were unable to face foreign competition when imports were resumed after the war. Even during the Second World War they did not conserve enough profits for modernisation and rehabilitation of the factories. They took little interest in initiating market and product research and failed to adopt even those technological improvements for cost reduction which had already become popular elsewhere.

The perpetuation of Managing Agency system was itself a sign of scarcity of entrepreneurial skill in the country and there is sufficient evidence on record to prove that Indian Managing Agents lacked the elements of expert technical knowledge and gave little attention to efficient internal organisation.<sup>43</sup> Some of the Managing Agents manipulated a good deal of profits for themselves to the utter neglect of the interests of the shareholders. At the persistent public demand, the Government was compelled to incorporate stiff provisions in the Companies Act 1936 to regulate them. They scared the investors who no longer liked to invest funds in the industrial securities. It was estimated by "The Economist" in 1928 that at least Rs. 500 million were invested by Indian nationals in foreign securities.<sup>44</sup>

During this period even foreign entrepreneurs had lacked dynamism and failed to break into new fields despite bumper profits earned during the pre-depression period. Under the spell of abnormally heavy profits they simply expanded the output in jute and plantations in excess of the demand. Thus, there was mal-allocation of country's resources. Bumper profits during this period failed to create chain reaction through multiplier accelerator process<sup>45</sup> because these profits were not retained in the country.

The reason why the British capital did not flow in the new fields was that it tended to adopt the outlook of the old East India Company with its emphasis on British controlled foreign trade rather than industrial production, in which competition would be encountered from British made goods. British capital in India thus did not want to come into competition with the capital at home. It should also be added that in the years after the World War I British industry also ceased to be very enterprising

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41. Rostow: *op. cit.*, p. 140.

42. Loknathan: *Industrial Organisation*, p. 320.

43. *Ibid.*, p. 315.

44. Quoted by Halen B. Lamb in his Article already quoted.

45. *Ibid.*, Meir and Baldwin, p. 132.



at home and was not in a position to undertake massive investment in foreign countries.<sup>46</sup>

It is now being increasingly realized that foreign capital cannot have the same impact on industrialisation as the domestic capital.

Adequate capital was also not forthcoming for financing the growth of industry and acted as hindrance for further expansion. Partly the fault lay at the door of the Managing Agents because of fall in their ethical standard. There was great enthusiasm for investment in the years immediately following the First World War. But acute depression in the prices of industrial securities in 1921 and a large number of company failures thereafter damped the enthusiasm of the investor. System of public deposits in cotton mills of Bombay and Ahmedabad also became less popular after the depression. There were no institutions specialising in providing industrial finance and commercial banks only catered to short-term requirements. Thus there was failure to fully mobilise even the nation's meagre savings for industrial expansion of the country. Fiscal Commission 1949 has quoted the estimates of Colin Clark to show that less savings were available for industrial development after the financial crisis of 1921.<sup>47</sup> Savings in the country were mainly utilised in purchasing bullion, landed estates, houses, etc., etc.

Scarcity of skill and technological knowledge also became a bottleneck in the development of the industry. The problem specially became acute during the Second World War when the new industries had to be started to fill the gaps caused by the stoppage of foreign imports. The problem can be understood in proper perspective when we realise that even after such a long period of experience Indian personnel were unable to execute expansion programme in TISCO. It was due to the inadequate attention given by the Government in opening more technical colleges and research laboratories. As a result there was a very wide gap in the earnings of skilled and unskilled workers and the country had to face greater shortage of skilled personnel than that of capital. All advanced countries have been able to reduce the gap between the wages of skilled and unskilled labour because of the greater attention that has been given to the development of skills.<sup>48</sup>

We may also emphasise the importance of non-economic factors which hindered progress. Our people did not possess a correct bent of mind and suitable social structure which is so essential for the development of growth. Social values necessary for promoting industrialisation did not develop adequately. Elite of the country consisted of feudal interests who

46. *Ibid.*, Halen B. Lamb, p. 496.

47. Fiscal Commission 1949-50.

48. A very interesting discussion on this aspect is given in *Economic Condition of Progress*, by Colin Clark.

had little inclination to develop either agriculture or industries and merely believed in conspicuous consumption and did not utilise their savings in a productive way. Status of the man was primarily determined by birth and not by achievement. Their outlook was different and horizon of expectation limited and they believed in traditionalism.

World depression by steeply reducing the demand of our exports and lowering the prices of agricultural produce also proved a great hindrance. It not only reduced the purchasing power of rural masses and thereby reduced their offtake of industrial goods but also created a crisis of confidence in the industry. Both Government and people were not willing to invest in the industrial growth. It was not until the war that effects of depression could be obliterated.

Despite low levels of income and acute poverty of the masses, there was inadequate development of resources and even existing resources were not utilised in the best possible manner.<sup>49</sup>

In retrospect, even after a century of development under British rule, the country possessed all the characteristics of an under-developed economy, characterised by low levels of productivity and national income, subsistence economy, lop-sided development, low rates of capital formation and investment, technological backwardness, structural defects and general economic stagnation. Despite the facts that about 70 per cent population was engaged in agriculture the country was dependent on food imports. Most of the people were condemned to utter poverty and did not get even enough food for subsistence not to speak of a balanced diet. More than 80 per cent population was illiterate. There was the vicious circle of low productivity, low real savings, low investment and capital deficiency leading to low productivity.<sup>50</sup>

There were certain favourable factors after the First World War which could have led to better rates of growth provided correct policies would have been followed and there was perfect cooperation between the Govern-

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49. The under-utilisation of resources was marked both in industry as well as agriculture. Despite the acute shortage of capital even the existing industrial equipment was not fully utilised by starting double or triple shifts except during war years. There was excessive productive capacity in relation to demand in jute and plantation industry. Under-utilisation of agricultural resources has already been noted in the earlier pages of this chapter.

The development of our resources was also taken care of, e.g., our mineral resources were not properly surveyed. Development of pisciculture was in its infancy. Our forest resources and water power resources were also underdeveloped. Thus on the one hand there was a spectre of human poverty and on the other hand there was inadequate utilisation and under-development of resources.

50. Introduction in *Problems of Under-developed Economy* by D.S. Nag.

ment and the people. But cooperation between a colonial power and its subjects was impossible. Probably the best minds and most energetic spirits tended to be drawn into problems of politics until independence was achieved'.<sup>51</sup>

Similarly the Colonial power was mainly engaged in suppressing the uprising of liberating forces and assisting the British Government in safeguarding and consolidating its Empire. To maintain their domination they adopted the well-known tactic of 'divide and rule' and continued to balance one religious group against another. They supported landed aristocracy and followed policies which enhanced its power over tenantry to win its full support for the British rule.<sup>52</sup>

To conclude, the economy of the country had sunk in so deep a morass that it required tremendous efforts for reorganisation so as to make it capable of generating momentum and economic growth.

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51. *Ibid.*, Rostow, *op. cit.*, p. 34.

52. "Perhaps the most serious debit mark against imperialism is that it sterilised for long the creative energies of many of the country's most able men and women, whom it inhibited from devoting more than a fraction of their thoughts to problems other than those of political liberation." *Public Enterprise and Economic Development of Hansen*, p. 152.

## CHAPTER VII

# INDEPENDENCE AND THE BEGINNING OF A NEW ECONOMIC ERA

The hard struggle of political emancipation which raged for more than six decades ended on 15th August, 1947 when the country gained Independence for which it had long been cherishing. But Independence was only a stepping stone and the ultimate aim was the benefit of the common man who should not only have improved living standard but should also be given opportunities for development of his talents and capacities. The political emancipation, however, brought in its wake a new set of problems and put a heavy pressure on the economy which was already strained under the effects of Second World War. Partition of the country and the events that followed further dislocated the economy. Our economic and social ideas had therefore to be shelved for the time being.<sup>1</sup> The political problems became uppermost and demanded immediate attention of the leadership to the neglect of economic situation facing the country. In this chapter we shall briefly discuss the various political and administrative problems that faced the country on the attainment of freedom as also the policies and programmes pursued by the national Government for accelerating the pace of economic growth in the country.

### Effect of Partition

The country which had remained one and economic activity functioned on the basis of inter-regional specialisation according to resources was partitioned in accordance with the statement made by His Majesty's Government on June 3, 1947. The principal basis of partition was that areas where Muslims constituted the majority would form Pakistan. Newly

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1. Regarding the situation facing the country at that time Pandit Nehru made the following observations in his speech in Parliament on May 22, 1952.

"At such a time it would have been the duty of any Government India might have had to try and re-establish law and order to see that the unity and stability of the country were maintained. Our economic and social ideals had to be shelved because they would not have flourished unless India was united and there was a measure of peace and stability in the country."

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created Pakistan thus comprised Sind, Baluchistan, N.W.F.P., and those districts of Punjab, Bengal, and Assam where Muslims were in majority.

The partition of the country had serious repercussions on Indian economy. It shattered the economy of both the countries as undivided India constituted an optimum unit for economic development in terms of area, population and resources.<sup>2</sup> The economic resources that fell to the respective shares of India and Pakistan can best be shown in the table given below:—

**Percentage Share of India and Pakistan in Total Area, Population and Primary Production of Undivided India.<sup>3</sup>**

<i>Area</i>	<i>Indian Union</i>	<i>Pakistan</i>
Area	77	23
Population total	82	18
Urban	89	11
Rural	81	19
Land Utilisation :		
Area under Forests	94	6
Net area sown	84	16
Net area irrigated	69	31
Production (Agriculture) :		
Principal Foodgrains	75	25
Sugar Cane	84	16
Principal Oil Seeds	55	45
Cotton	60	40
Raw Jute	19	81
Production (Plantation) :		
Tea	85	15
Coffee	100	..
Tobacco	78	22
Production (Minerals)	97	3

Pakistan got better agricultural resources. As against 18 per cent population the production of foodgrains amounted to 25 per cent of the undivided India. The potentialities for agricultural development were also better as the proportion of culturable waste was more and the chances of extending irrigation were also better. The surplus food production of

2. O.H.K. Spate: *A General and Regional Geography*, p. 306.

3. Fiscal Commission Report 1949-50, Vol. I, p. 23.

Punjab and Sind was no longer available and to that extent food deficit increased further.

As regards mineral resources, Indian Union was at a considerable advantage. Except for petroleum, gypsum and sulphur, where the share of Pakistan was larger in relation to her population, Indian Union dominated in all other mineral resources. In fact, Pakistan lacked the very base on which she could start heavy industries.

In respect of industry, the balance of advantage was entirely on the side of India. Except for some cement factories, engineering workshops, cotton and sugar mills, Pakistan did not possess any major industry. She was almost entirely dependent on outside sources for manufactured goods. The consequences of partition on our trade and industry were quite serious. The greatest effect was felt by our textile industries. Calcutta jute mills were almost entirely dependent for raw jute on Pakistani supplies. Between July 1948 to June 1949, the country imported raw jute worth Rs. 80 crores from Pakistan. The cotton textile industry also obtained substantial quantity of superior cotton from Western Pakistan. In 1948-49, we imported 4 lakh bales of Pakistani cotton. It became quite clear that we could no longer depend on Pakistani supplies of jute and cotton and had to make serious and sustained efforts to reduce our dependence on Pakistan for maintaining the growth of textile industries. As a result of the efforts, the country has become almost self-sufficient in raw jute and alternative arrangements have been made to obtain superior quality cotton from U.S.A., Egypt, etc.

Migration of Muslim artisans and skilled workers also dealt a severe blow to cottage and small scale industries of Punjab, Delhi, Rajasthan and Uttar Pradesh. Displaced persons from Pakistan could not make up for the deficiency and it took considerable time before new workers could be trained to such vocations.

Our trade with Afghanistan, Persia, Iraq, etc., which was quite flourishing in pre-Second World War period was also adversely affected. In fact, before partition, our country used to act as a supplier of finished goods to these countries and their raw materials were exported through Indian ports. Thus, there was flourishing entrepot trade which has almost entirely been eliminated on account of the refusal of Pakistan to allow transit facilities. This is specially true of our trade with Afghanistan.

Trade between two countries also reflects their interdependence. In the beginning India was dependent on Pakistan mainly for raw jute, cotton and hides and skins while Pakistan imported cloth, jute, sugar, coal, mustard oil, iron and steel and a host of consumer goods. Though requirements of Pakistan for our goods were varied but her total exports considerably exceeded the imports. Thus, Pakistan enjoyed a favourable balance of trade and this was a pointer of our greater dependence on Pakistani supplies. Owing to lack of cooperation, both the countries have tried

to reduce their interdependence.<sup>4</sup> India has become more self-sufficient in jute and cotton; while Pakistan has made alternative arrangements for meeting her requirements and has also developed industry in her own territory.

To summarise, undivided India constituted an optimum unit for economic development and partition was a source of weakness for both Pakistan and Indian Union. It dislocated the economies of both the countries and the lack of cooperation between them further complicated the problem.

### Problem of Displaced Persons

The problem of rehabilitation of Hindus displaced from Pakistan was another problem that the Government had to face immediately following the attainment of freedom. The problem of rehabilitating 73 lakh persons should be understood against the background of Government scarcely formed and having an administrative machinery which was disrupted by partition. Never before in the History of World did such a large scale transfer of population take place under such adverse conditions.<sup>5</sup> Interchange of population severely dislocated the economy of the Punjab for the time being and adversely affected the agricultural production at a time when the country was facing acute food shortage.

The stupendous task of rehabilitating 73 lakh displaced persons was further complicated since most of the persons migrating from Pakistan were following urban occupations.<sup>6</sup> On the other hand, Muslims who left for Pakistan were mostly skilled workers and artisans.

4. The following table points out the diminishing importance of Indo-Pakistani trade. Except in 1951-52 when imports of raw jute jumped up under the stimulus of Korean war demand, there has been a gradual decline in the volume of trade.

Year	Exports to Pakistan	Imports to Pakistan	Balance (Rs. in crores)
1948-49	75.01	109.29	—34.28
1949-50	43.20	44.05	— .75
1950-51	30.60	43.87	—13.27
1951-52	45.26	87.50	—42.24
1952-53	31.10	21.88	+9.22
1953-54	8.01	19.28	—11.27
1954-55	9.77	19.38	—9.61

5. Vakil: *op. cit.*, p. 25.

6. According to 1951 Census, 712 out of 1,000 displaced persons had been following non-agricultural occupations and the percentage of literacy in them was more than double of All-India Average—*Vide* Census of India, Paper No. 4 on Displaced Persons, p. 2.

### Communal Situation

Muslim atrocities in Pakistan had their reaction in India and communal riots broke out in some parts of the country. Government used its entire force in suppressing the communal riots as it was wedded to the principle of secularism. In doing so, it had to incur the displeasure of a certain section of Hindu community and at the same time divert its energy and resources from other vital economic problems facing the country.

### Integration of Princely States

The problem of integrating the states posed a serious challenge to the ingenuity and tact of leadership. Without integration of the states the vision of freedom would not have been fully achieved. Accession of the princely states was the first step in the integration. All the rulers were made to realise that it would be in their own interest to integrate their states with the Indian Union so that responsible governments might begin functioning. At last rulers agreed to surrender their powers in return for privy purses.

Most of the states were not viable units and could not assume the responsibility of a welfare state. Out of 554 states, 216 had been merged into provinces and the remaining 338 states were reduced to 14 unions of states. On the recommendation of States Reorganisation Commission, the entire country was divided into more homogeneous units.

The transfer of power on such a tremendous scale should have proceeded so peacefully and should have so ingeniously worked into a pattern of Indian unity is a feat of statesmanship of which any nation would be proud.<sup>7</sup> The main credit for this task is rightly deserved by Sardar Patel. Excepting Kashmir problem the integration of states has been completed. Kashmir continues to be a bone of contention between India and Pakistan and has been a source of huge financial drain on our resources.

From the economic point of view an integrated and reorganised set-up of states was of very great significance. It was now possible for us to make a more rational utilisation of the economic resources for the development of agriculture, industry and trade. It is now recognised by economists that from the point of view of economic development a very big state is at a considerable advantage over a small state.

To summarise, the political emancipation of the country brought in its wake several complex problems. The communal disturbances that preceded and followed the Independence rocked the whole country and Government had to strain all her nerves in maintaining law and order. Mass migration of people involving rehabilitation of displaced persons was indeed a stupendous task. Not only that. Trouble also started in Kashmir

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7. *Eastern Economist*, July 16, 1948.



followed shortly afterwards by trouble in feudal Hyderabad. The none-too-friendly relations between India and Pakistan created a state of tension and it looked that there might be an open war any time with Pakistan over Kashmir issue. The integration of states was another challenge to the leadership. The newly born Government met the challenge with a fair degree of success. Shri Nehru, therefore, rightly observed: "After Independence we had gigantic tasks before us and we had constantly to face difficulties and turmoil. There were the post-war difficulties, difficulties followed by the partition and there were the difficulties due to constant tension with Pakistan.... I believe we can stand comparison with any country so far as our achievements in the last 4 or 5 years are concerned."<sup>8</sup>

As soon as the immediate problems mentioned above subsided, the Government set about the urgent task of generating an accelerated process of cumulative and self-sustaining growth in the country. The urgency became all the more compelling because of the growing awareness of the present state of poverty and the potentialities of development on the part of the people. Unlike other advanced countries, the political revolution in India preceded the economic revolution and made it imperative for the Government to accomplish the economic development of the country with the greatest possible speed. There was growing discontentment among masses who were made to believe by the Congress elite that Independence would usher in an era of plenty and prosperity.

The economic situation in the country was, however, quite critical. In fact, even before the country became Independent, the economic situation was gradually deteriorating. Food situation was difficult because of the unfavourable weather conditions and difficulty of importing sufficient quantity of foodgrains. Industrial production was also hampered due to non-availability of capital goods to replace worn out machinery, transport bottleneck and labour unrest. There was further deterioration in the economic situation. Food situation in the years following partition remained as difficult as before. Harvests were no longer good. The surplus food production of Western Pakistan was no longer available and international allocations were insufficient to meet the estimated food deficit.<sup>9</sup> Against the background of such a difficult situation, Government decided to adopt the policy of gradual decontrol forgetting the lessons of war-time scarcities and the recommendations of Famine Commission 1945 and Commodity Price Boards. Industrial production was also substantially below the war-

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8. Extract from the speech of Shri Jawaharlal Nehru in Parliament in May, 1952.

9. *Eastern Economist*, dated 2nd January, 1948 "Food and Agriculture".

time peak. As a result, there was sharp increase in prices.<sup>10</sup> People who were aspiring that with the attainment of Independence, their condition would be much better, were greatly disillusioned. Their income failed to keep pace with the rise in the cost of living.

It thus became essential that Government should lose no time in charting a course of action which would develop an economic, social, and political milieu conducive for steady and persistent economic advancement.<sup>11</sup> There was, therefore, demand for a quick and as painless as possible economic development coupled with social justice and equality. In this connection the following words of late Jawaharlal Nehru are worth quoting:—

“In India we have entered belatedly the phase of the Industrial Revolution. We have done so at a time when parts of the world are in a jet and nuclear age. We have thus in effect to proceed simultaneously with both these revolutionary changes and this involves a tremendous burden. We have accepted socialism as our goal, not only because it seems to us right and it is beneficial, but because there is no other way for the solution of our economic problems.”<sup>12</sup>

Against the background of deteriorating economic situation and rising expectation of the people, the national Government formulated policies for industrial and agricultural development of the country.

### Policies of the National Government in the Sphere of Industry

The Industrial Policy was announced in April, 1948—in less than eight months from the day of Independence. Indeed, it must go to the credit of Government that despite its engagement in problems of unprecedented magnitude resulting from partition of the country, it could formulate a positive policy for the rapid industrialisation of the country. In formulating the industrial policy, the Government took into consideration the lessons of past experience and the politico-socio-economic conditions prevailing in the country.

With a view to achieving accelerated rate of growth the 1948 Policy

#### 10. Table showing the rise in prices.\*

Period	(Base year August 1939=100)		
	Food Articles	Manufactured Articles	General Index
Nov., 1947	294.8	283.2	302
August, 1948	397.7	353	382.9
% Increase	34.9	24.6	26.8

\*Report on Currency and Finance 1948-49, p. 67.

11. Wilfred, *op. cit.*, p. 48.

12. Jawaharlal Nehru quoted by Ignacy Sachs in his book, p. 34.

accepted the principle of "Mixed Economy"<sup>13</sup> as the basis of economic development. The Resolution clearly emphasized that the state will have to play a progressively active role in the development of the industries and will supplement the effort of the private enterprise. But the gradual extension of public sector did not mean that the Government proposed to take almost all the important sectors of the economy in its fold. The private sector was assigned an adequate share or participation in the country's development for which it was to be given adequate facilities. But at the same time it has to be regulated so that it may direct its energies in the desired channels and may work for public good. According to Professor D.R. Gadgil the total objective may be taken to afford the private enterprise the needed security without which it cannot develop and to guarantee on the other hand that such assistance does not result in an increasingly favourable distribution of the national product in favour of private entrepreneurs.<sup>14</sup>

For specifying the proper role of public and private enterprises, industries were divided into four categories.<sup>15</sup> Industries placed under the first category consisting of manufacture of arms and ammunition, production and control of atomic energy and the ownership and management of railways were to be exclusive monopoly of the Central Government which had the power to take over any industry vital for national defence. First part thus merely asserted what in fact already obtained and was indisputable.<sup>16</sup> In second category were included six industries (iron steel, coal, aircraft manufacture, ship-building, manufacture of telephones, telegraphs and wireless apparatus excluding radio receiving sets and mineral oils) where the state was to undertake the establishment of new units while existing units in these industries in private sector could work for ten years. After the lapse of this period, the Government would review its policy about their nationalisation in the circumstances prevailing at that time. The third category comprised eighteen industries of all-India importance which were well organised and included inter alia basic industries like engineering, machine tools, machinery, chemicals, fertilisers, non-ferrous metals and cotton, cement, sugar industries, etc. These industries were to be regulated by the Central Government in the national interest in consultation with State Governments and representatives of industries and trade. The fourth category covered the remaining industries where private enterprise—individual

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13. Gunnar Myrdal: *Asian Drama*, Vol. III, p. 818, "Mixed" exaggerates by far the role of public enterprise as long as big industry remains a minor sector. And even in big industry, private enterprise is assumed to continue to be a large part growing absolutely, if not relatively.

14. *Vide* his article on "Approach to Third Five-Year Plan."

15. Detailed classification of industries is given in Appendix 'A'.

16. Venkat Subbiah: *Indian Economy Since Independence*, p. 90.

as well as co-operative—would undertake expansion. It was, however, provided that the state had the inherent right to acquire any industrial undertaking included in the third or fourth category.

Special emphasis was laid on the development on cottage and small scale industries which were assigned an important place in the new pattern of industrialisation. The Central Government undertook to investigate how and in what manner these industries could be co-ordinated and integrated with large scale industries.

In view of the working of the industrial policy for a considerable period of time and the adoption of Socialistic Pattern of Society by Parliament in 1954 the Government revised its policy in 1956. As a result the Government decided to take greater initiative in developing the economy. Special emphasis was laid on the development of key and basic industries requiring massive investment which could not be developed by the private sector. The Government also proposed to take measures to effect reduction in the inequalities of income and wealth.

According to the revised policy, industries were divided into three categories with special reference to the role that state will play in each category. The inherent right of the state to acquire any undertaking or to undertake production in any industry was again emphasised. In the first category called 'Schedule A' were listed 17 industries which were to be developed by the Government though it could secure the cooperation of private enterprise whenever it was necessary in national interest. Existing private concerns were allowed to function in this category subject to Government regulation. Industries in this category included all the industries covered in the first two categories in 1948 Resolution, in addition to air transport (which was nationalised in 1950), and generation and distribution of electricity, heavy electrical plant and machinery and minerals.

In second category (called Schedule B) the Resolution lists 12 industries which were to be progressively state owned; but private sector was also expected to supplement the efforts of the Government. Important among this category of industries were aluminium, machine tools, ferro alloys chemicals, road and sea transport.

The third category comprised the remaining industries which were to be developed mainly by the private sector.

It was provided in the revised Resolution that the Government would accord fair and non-discriminatory treatment to both public and private enterprise where they exist side by side in a particular industry. As in the previous resolution, the Government reiterated its faith in placing special emphasis on the development of cottage and small industries and promised all possible help to the private sector in expanding the production but it was to be regulated in national interest and had to work within the framework of Plan requirements.

Recently the Government has announced some important changes<sup>17</sup> in the industrial policy which are based on the recommendations of the Dutt Committee. The new policy envisages a core sector, a heavy investment sector, a middle sector, a joint sector and reserved sector.

Core industries<sup>18</sup> consist of basic, critical and strategic industries in the economy. Detailed industry plan will be prepared and essential inputs made available on a priority basis. Thus these industries will be encouraged in all possible ways. Such of the core industries as are included in Schedule 'A' of the Industrial Policy Resolution 1956 will continue to be reserved for the public sector.

In addition to the core sector any new investment proposition of over Rs. 5 crores shall be deemed to be in the heavy investment sector. Larger industrial houses as defined by the Dutt Committee and foreign concerns will contribute mainly to the establishment of industries in these two sectors leaving the opportunities in the remaining sector primarily to other classes of entrepreneurs.

Middle sector will include projects involving investment ranging from Rs. 1 crore to Rs. 5 crores. Applications of parties other than undertakings belonging to larger industrial houses will be given preference. In this sector applications of larger industrial houses will be considered only for achieving minimum economic level of production.

The existing policy of reservation for small scale sector will be continued and the area of such reservation will be extended from time to time. Steel furniture, cycle tyres and tubes, mechanical toys, aluminium utensils, fountain pens, electric horns, tooth paste and hydraulic jacks below 30 tonne capacity have been further added to the list.

A novel feature is the right given to the public financial institutions of converting loans given and debentures issued either wholly or partly into equity shares at their option within a specified period of time. Thus a new joint sector has been created. In respect of agro-industries, co-operatives will be given preference in licensing new units.

The present policy envisages greater participation of public sector beyond the fields included in the Industrial Policy Resolution 1956. Consumer goods industries will be set up where profits can be quickly earned. Various production ministries will examine the possibility of taking up short gestation projects yielding quick returns so as to cover to the extent

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17. *The Economic Times*, February 19, 1970.

18. The 'Core sector' will include nitrogenous and phosphatic fertilisers, pesticides, tractors and power tillers, rock-phosphate and pyrites, iron ore, pig iron and steel, alloy and special steels, non-ferrous metals, oil exploration and production, petroleum refinings, selected petro-chemicals, DMT, Caprolactum, acrylantrile, synthetic rubber, coking coal, heavy industrial machinery, ship-building and dredgers, newsprint, and certain electronics equipment.

possible, major production gaps likely to develop in the various sectors in the next few years.

### Critical Review of Industrial Policy

If there is one legislative measure or policy which has never ceased to whip up strong emotion since Independence, it is the Industrial Policy Resolution.

Advocates of private enterprise have complained that private sector has been assigned only secondary place in the national development and uncertainty has been created about the future of private enterprise. Despite the steady growth of public sector, industrial development has not reached a stage when one may complain of the lack of scope. In fact, it will be not possible even for several decades to come.<sup>19</sup>

The gradual extension of public enterprise was inevitable as the private sector had failed to develop industries adequately in the past. There was also no prospect that the private sector would be able to develop basic and key industries involving huge financial outlays.<sup>20</sup> The monopoly of foreign capital (e.g., oil prospecting and refining, etc.) could also be done away with only by the Government.

Government policy on nationalisation has also been quite pragmatic and has not been influenced by doctrinaire considerations of creating a socialist pattern of society. Since Independence, Government has nationalised air transport, life insurance, gold mines and banking. This extreme step was taken only on the failure of private sector to work efficiently and for social good in these sectors. The categorisation of industries has also not been rigid and Government has allowed the establishment of new units by private sector in those industries which were reserved for public sector.<sup>21</sup> The establishment of new units by Government, in industries mainly re-

19. Dr. John Mathai, the then Finance Minister, addressing a meeting of the Associated Chambers of Commerce in 1948, asserted: 'In my opinion for so long a period as we can foresee, there will be not merely a large but an increasing field for private enterprise in India and the only limit to it will be its own readiness to venture ahead and organise itself for the great tasks that lie ahead. Reported in *Commerce Annual*, 1948.

20. It is in new investment that the government is interested in planning for a relative as well as absolute increase in the public sector. Such planning does not need a socialist justification but mere decision to steer investment towards heavy industry where private enterprise is not forthcoming. When private industry wants to enter, it is not stopped very effectively even in that field. Gunnar Myrdal, *Asian Drama*, Vol. III, p. 826.

21. Gunnar Myrdal: *Asian Drama*, Vol. III, p. 825. The question whether to develop large scale industry by investments in the public or private sector has been solved more by ad hoc practical considerations than by ideological commitment to expansion of the public sector.

served for private sector (e.g., cement, paper, medicines and drugs, etc.) has been on account of the failure of the private sector to develop these industries adequately. Government approach has been practical and indoctrinaire.<sup>22</sup>

On the other hand there is a strong feeling that all economic policies, whatever their intention, have been administered to the benefit of a small sector of influential big businessmen<sup>23</sup> who hold the reigns of the Government. The fruits of industrialisation have not been shared by masses and there is growing concentration of wealth in the hands of a small group of people. Government has also accorded step-motherly treatment to the cottage and small scale industries.

In fine, the controversy of private versus public sector has been misleading. Both are in most cases complementary.<sup>24</sup> Private sector lacked the adaptability to meet the new situation and failed to appreciate the many favourable factors in the situation. There is a belated recognition of this fact and controversy has lost force. It is now being recognised by some leading businessmen that the future of private sector will depend upon its recognition of the social responsibilities<sup>25</sup> and its ability to dissociate from those members of business community who are guilty of sharp practices so that the public may have better image of private business.<sup>26</sup>

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22. The policy has always been pragmatic and, therefore, flexible and there in a considerable amount of similar development in both the sectors of our national economy. For instance a substantial amount of machine building in the private sector also has been developed. Similarly the fertiliser industry has grown both in the public and private sector. The prime consideration has always been the requirement of rapid growth rather than any doctrinaire division of spheres. There is so much to be done that whoever can do it always gets the encouragement. Wherver resources permitted, public sector units have been developed to the maximum extent possible.

23. The share of the four top houses, Birla, J.K., Tata and Shri Ram in total approved investments in 1965-66 was 25.6 per cent and 28 houses accounted for the bulk of investments.—Hazari Report, p. 7.

24. Government investment is mainly concentrated in heavy industries where little private initiative is forthcoming. To the extent government investment creates external economies or provides goods that would otherwise be scarce owing to strained foreign exchange situation, there should be a harmony of investment. Public investment has stimulated private sector by providing opportunities for supplying construction and raw materials.

25. Social responsibilities of American Businessman, *Commerce*, dated 29th May, 1965.

26. Shri H.V.R. Aiyanger has emphasised this aspect in Hirachand Memorial Lecture 1965. The Chairman of Union Carbide in his Annual Speech in 1965 has also emphasised the need for improving business conduct and morality.

### Attitude Towards Foreign Capital

The Government also adopted a favourable policy towards foreign capital and abandoned its attitude of malice and suspicion which had grown during pre-Independence Era. Policy regarding foreign capital was enunciated by Nehru in a statement made in Parliament on 19th April, 1949 which even now continues to be the principal basis. The statement emphasised that 'Indian capital needs to be supplemented by foreign capital not only because our national savings will not be enough for rapid development of the country but also because in many cases scientific, technical and industrial knowledge and capital equipment can best be secured along with the foreign capital'.<sup>27</sup> The foreign capital was, however, welcome only in manufacturing fields specially in those where Indian capital could not undertake manufacture and should save foreign exchange by stopping or reducing imports and/or earn foreign exchange through the export of manufactures.<sup>28</sup> All foreign investment projects were to be screened and after judging each case on its own merits, permission was to be accorded on terms which were in national interest. Further, the Government wanted that as a rule, major interest in ownership and effective control should be in Indian hands but exceptions have been made in national interest.

The Government have further assured foreign capital of non-discriminatory treatment vis-a-vis Indian capital. Facility of remitting profit subject to the availability of foreign exchange has been allowed. But the Government has attached great importance to the training and employment of Indian personnel. Foreign technicians and managerial personnel will, however, be kept on posts requiring exceptional skill not available in the country.

The flow of foreign capital has not been commensurate with the national requirement. Political and taxation considerations have hindered the inflow of foreign capital.

### Regulation of Industry

As contemplated in the Industrial Policy Resolution, Industries (Development and Regulation) Act, 1951 was enacted to enable the Government to secure (1) a proper utilisation of the country's resources, (2) a balanced development of industry, (3) a proper regional distribution of various industries. Every scheme for the establishment of a new industrial unit or substantial expansion of the existing unit in the industries listed in the First Schedule required licence from the Government. Licence was to be granted after taking into consideration the present and future demand

27. *Vide* his statement in Parliament.

28. C.I. Herman: *Foreign Capital Investment in India—Basic Information for U.S. Businessmen*, p. 2.



vis-a-vis the plan targets, availability of suitable raw materials, appropriate location, choice of manufacturing technique, economic size of the operations.<sup>29</sup> The Act also provides for close cooperation between government, industry, labour and other interests for the development of the economy through the Central Advisory Council of Industries, its Reviewing Sub-Committees, Standing Committees, Development Councils and Industrial Panels.<sup>30</sup> The Central Government is empowered to investigate the affairs of any industrial undertaking and take steps to manage it if the circumstances justify such a course of action.

In response to criticism of the entrepreneurs regarding the irksome procedure and inordinate delays, Government exempted from licence small undertakings employing fewer than 100 workers and having fixed assets not exceeding Rs. 10 lakhs. Exemption limit was later on modified and at present stands at Rs. 1 crore. Procedure was also simplified by implementing the recommendations of the Industries Development Procedure Committee. Industries were categorised into 3 lists, viz., (i) free list, (2) merit list, (3) banned list and a number of industries (40 industries) were delicensed.

Apart from the red-tapism of the government machinery one must not suppose that industries are closely controlled. According to Professor Galbraith, Indian Economy "is one of the world's least controlled of planned economies and is even less controlled than American economy. Professor R.K. Hazari and the Dutt Committee who reviewed the working of the licensing system, clearly pointed out the failure of the licensing policy which has not attained the objectives for which it was designed. Licensing and its ancillary sanctions were concerned more with the conservation and allocation of foreign exchange rather than with the channelisation of the investment in proper direction.<sup>31</sup> The licensing system worked for the benefit of a few influential industrial houses and industrial progress was retarded because they could not implement all the licences issued to them in time. There was no follow-up action on licences to review the progress of implementation and in several cases, firms established much larger capacities than permitted without attracting penal sanction. Specialised financial institutions also provided disproportionately larger financial assistance to the 20 large industrial houses. The licensing committee was not

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29. Report of D.G.T.S. for 1962-63, p. 48.

30. Central Advisory Council of Industries advises Government on all matters concerning development and regulation of the industries covered under the Act. Development Councils discuss problem relating to the development and regulation of industries for which they are constituted. In case of industries not sufficiently developed to sustain Development Council, industrial penalties have been set up.

31. Industrial Planning and Licensing Policy Report by R.K. Hazari, p. 30.

given any clear guidelines to reinforce and supplement the plan targets,<sup>32</sup> and determination of priorities among different industries. In fine, the licensing system instead of preventing concentration of economic power accentuated it and failed to bring better regional distribution of industry and retarded the growth of priority industries.

The licensing system has been revised on the recommendations of the Dutt Committee with a view to benefit average entrepreneurs rather than top industrial houses. The big industrial houses defined in the Dutt Committee Report would be mainly allowed to set up industries in the heavy investment and core sector. In middle sector, their applications would be considered for achieving minimum economic level and if other entrepreneurs are not willing to set up industries. But big industrial houses will not be exempted from licensing provision under any circumstance. In middle sector involving investment ranging between Rs. 1 crore to Rs. 5 crores, licence applications of parties other than undertaking belonging to larger industrial houses will be given licences liberally except where foreign exchange implications necessitate careful scrutiny. Exemption limit for licensing has been raised from Rs. 25 lakhs to Rs. 1 crore subject to certain propositions involving considerable foreign exchange. Exemption limit will not be applicable to larger industrial houses and dominant undertakings.

The regulatory mechanism need to be tightened further for promoting sound industrial growth and making best use of national resources. Social channelisation of investment cannot be achieved by reliance upon one instrument alone, be it industrial licensing, taxation, market mechanism, or any other elements; all these and other techniques have to be used in concert.<sup>33</sup> Regulatory measures should not be abandoned simply because of administrative deficiencies but on the other hand efforts should be made to streamline the official machinery.

### Fiscal Policy

In pursuance of the undertaking given in the Industrial Policy Resolution 1948, the Government appointed a Fiscal Commission in April 1949. The Commission recommended that 'the protection to industries should be related to an overall planning of economic development—otherwise there may be unequal distribution of burden and uncoordinated growth of industries.'<sup>34</sup> Industries coming under Plan sector were classified into three categories. In the first category were put defence and other industries which were to be protected at all costs on national consideration. Basic and key industries were placed in the second category in regard to which

32. *Ibid.*, p. 19.

33. Hazari Report.

34. Fiscal Commission, p. 34.

Tariff Authority was given full authority to lay down terms and conditions of protection. As regards the remaining industries the Commission recommended that such industries should be protected only when they are likely to be developed sufficiently so that they might be able to carry on without protection within a reasonable period of time. Fiscal Commission also laid considerable stress on the other factors necessary for industrial development; important among them being, development of capital resources, labour and managerial efficiency, suitable railway rates policy and adequate banking facilities.

In pursuance of the recommendations, tariff making authority was placed on permanent footing and was designated as the Tariff Commission. The Tariff Commission has been quite liberal in granting protection to industries and repudiated all restraints on the practice of protection.<sup>35</sup> Because of the shortage of foreign exchange all articles produced in the country are not allowed to be imported whatever the cost of indigenous articles. The sheltered market has made our industrialists slack in improving industrial efficiency and most products developed since Independence cannot withstand foreign competition.<sup>36</sup>

#### Government Policies in Agricultural Sector

With a view to redeeming the pledge given by the Congress Party of comprehensive land reforms earlier, an Agrarian Reforms Committee was appointed under the Chairmanship of J.C. Kumarappa. The Committee came to the conclusion that there is no place for intermediaries in the agrarian economy of the country<sup>37</sup> and land must belong to the tiller of the soil except in case of widows, minors and other disabled persons. There should be no exploitation of one class by another and tenants should be protected from rack renting and illegal exactions.<sup>38</sup> Politically it was also considered desirable to free the peasants from the oppression of the zamindars and jagirdars, otherwise independence would have no meaning for them.

The First Plan document incorporated the basic recommendations of the Kumarappa Committee. The main policies have been conceived in terms of different interests in land, i.e., intermediaries, large owners of land, small and medium owners and tenants-at-will. At the same time care has been taken to provide fully for the adverse effects on production.<sup>39</sup>

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35. Venkatsubbiah. *op. cit.*, p. 190.

36. Impression of U.S. Mission reported in *Commerce* dated 12th June, 1965.

37. *Vide*, p. 7 of the Report.

38. *Ibid.*, p. 8.

39. First Plan, p. 151.

### Abolition of Intermediaries

At the time of independence, intermediary tenures, interposed between the cultivators and the state, accounted for about 45 per cent of the total area of the country.<sup>40</sup> In line with the policy enunciated by the Agrarian Reforms Committee, State Governments undertook to abolish zamindari and jagirdari system. In most of the states, reasonable amount of compensation has been provided to the intermediaries and they have also been allowed to retain their 'Sir' lands for personal cultivation. Thus cultivators have been brought into direct contact with the state.

### Ceiling on Holdings

For reducing disparities in wealth and income and for providing equality of status and opportunity, the aim of Government has been to fix an upper limit to the area of land that may be held by an individual for personal cultivation. But at the same time those farms have been excluded from the purview of ceiling legislation which are so efficiently managed that their break-up would lead to fall in production.

The maximum limit on ceiling is to be fixed by the State Governments in the light of the circumstances prevailing in the state but broadly the aim has been to allow an individual to hold 3 times the family holding. For the cultivation of the land arising out of the implementation of ceiling legislation, preference is to be given to cooperative groups and to landless workers.

### Resumption of Land for Personal Cultivation

Medium and small owners of land were to be allowed to resume land from the tenants for personal cultivation within a prescribed period of about 5 years.

### Tenancy Reforms

These reforms have, in the main, been designed for the protection of tenants in 'ryotwari' areas, who had virtually no legislative protection in the pre-independence period. The contemplated measures of the tenancy reform provide that the tenants should pay reasonable amount of rent which should not exceed 1/4th or 1/5th of the gross produce. There should be security of tenure and grounds on which ejection may be made should be limited. The usual grounds of ejection should be (a) failure to pay rent, (b) misuse of land, (c) subletting of land.<sup>41</sup> Further, the tenant is entitled to claim compensation for the improvement made by him.

40. S.C. Jain: *Agricultural Policy in India*, p. 122. Allied Publishers, New Delhi, 1965.

41. *Agricultural Legislation in India—Volume on Law Reforms Introduction.*

Tenants have also been given the option to purchase the land by paying a reasonable price in instalments spread over a certain period. The price of land is recoverable along with the land revenue and the state will compensate the land owners in the form of bonds.

As for small and uneconomic holdings, the Government wanted to encourage cooperative farming so as to ensure better planning of the use of land, including selection of crops, rotation, soil conservation, development of irrigation and introduction of improved techniques. Though formation of cooperative farming societies was voluntary yet they were to be given financial and technical assistance by the Government and were to be accorded preference in leasing of agricultural wasteland and land taken from private owners as a result of ceiling legislation.

Besides encouraging the formation of cooperative farming societies, the Government also wanted to strengthen cooperative movement in farm operations for maximising production. A widespread cooperative movement could help in achieving the reorganisation of the village economy.

The institution of village panchayats which had decayed during the British regime was to be revitalised as these village panchayats could be very useful in the effective implementation of land reforms. They could arrange for the cultivation of village wasteland and settle land to new tenants wherever substantial owners did not cultivate land efficiently. Besides they were to be entrusted with the programmes of village development.

The progress in the implementation of land has been tardy. Several conferences were held between the Chief Ministers and the Prime Minister, Mrs. Indira Gandhi to expedite land reforms. Shri V.V. Giri in his address to the Joint Session of Parliament in 1970 urged the states to expedite land reforms for promoting social and economic advancement of the rural masses.

### **National Economic Plan**

With a view to achieving accelerated development the national Government decided to adopt economic planning. The central object of planning was to initiate a process of development which would raise living standards and open out to people new opportunities for a richer and more varied life. It involved a clearly defined system of objectives in terms of which to frame overall policies.<sup>42</sup>

Even before the country became Independent, great interest was aroused in planning. In 1938, Congress Party appointed a National Planning Committee under the Chairmanship of Jawaharlal Nehru to chalk out a programme of planned development. After the Second World War, not only was the Government preparing a plan for the post-war period but

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42. First Five Year Plan, p. 7.

even others had put concrete proposals in this respect.<sup>43</sup> The national Government therefore decided to set up the Planning Commission in 1950 to formulate a plan for the most effective and balanced utilisation of the country's resources and determine the nature of machinery necessary for securing its implementation.

The draft outline of the First Five-Year Plan was placed for the consideration of Parliament in October 1951. It was the first step in a series for generating a rapid increase in the national production without impairing social stability. It was the product of 'considerable and conscientious efforts' on the part of the Planning Commission and enabled people to think of the most important problems affecting our economic and social progress as parts of a well coordinated programme.<sup>44</sup> The first plan was subsequently modified in the light of public criticisms in changing economic situation and mainly aimed at rehabilitating the economy from the stresses and strains of the Second World War and Partition.

Since then two more plans have been prepared and executed, the fourth one is in the process of preparation and implementation.

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43. In 1944 a group of Bombay Industrialists framed a 'Plan of Economic Development for India' popularly known as Bombay Plan. Indian Federation of Labour also prepared a plan for Economic development of India. Shri S.N. Agarwal drafted other plan of development based on the ideas of Gandhiji which was popularly known as Gandhian plan.

44. Kunjru's Speech in Parliament quoted by C.D. Deshmukh in his book, *Economic Development in India*, p. 84.

## CHAPTER VIII

### AGRICULTURAL DEVELOPMENT DURING THE PLAN PERIOD

The role of agriculture in the economic development of a country where it is the most important source of livelihood needs no emphasis. "By its sheer size, it exercises a dominant influence on the overall rate of growth of the economy and if it were to remain stagnant (or develop only very slowly) it would act as a built-in depressor, even if the rest of the economy were to develop at 8 to 10 per cent or more per year."<sup>1</sup>

Under the context of Indian conditions, the key role of agriculture could hardly be overemphasised in the planned development of the economy. The emphasis was also due to the peculiar situation created during the Second World War and after. Bengal famine which took a heavy toll of human lives had a far reaching effect on the state responsibility.<sup>2</sup> The problems of food supply became one of the primary concerns of the Government. Food situation in the years following the partition remained as difficult as before as the surplus producing areas of Sind and Punjab formed part of Pakistan. The partition also resulted in the shortage of cotton and jute supplies. The strained relations with Pakistan made it imperative for the nation to do away with the Pakistani supplies as early as possible. The First Plan, therefore, was framed with a view to tackling these problems. Greater emphasis was laid in increasing the production of jute and cotton. As against the target of 14 per cent increase in food-grains, production targets for jute and cotton were set at 63 and 42 per cent respectively.<sup>3</sup> As it appeared that these targets could be achieved by the end of First Plan, the emphasis in the Second Plan was shifted to the development of basic and key industries. In retrospect, it appears that an integrated approach towards agricultural and industrial development was not adopted. As a result, the country could not achieve the desired rate of growth.

It is, however, only recently that the importance of agricultural pro-

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1. Economic Bulletin for Asia and Far-East June, 1965, 'National Development Perspective of Agriculture in ECAFE Region'.

2. Report of the Famine Inquiry Commission—Main Report, p. 113.

3. First Plan, p. 208.

gress is seen in proper perspective.<sup>4</sup> The rate of growth of agricultural output is usually a critical determinant of the rate at which industrialisation can proceed.<sup>5</sup> It is realised that the attainment and maintenance of a satisfactory tempo of industrialisation, an ever increasing level of exports, stability of prices, adequate expansion of employment opportunities, minimum level of living for the weaker sections of the community and a reasonable rate of economic growth call for a high and sustained rate of growth in agriculture.<sup>6</sup> Because of the interdependence, the problem of agricultural and industrial development cannot be tackled in isolation and independently of the other. They are to be properly integrated and co-ordinated, if each is to make its full potential contribution to economic growth.<sup>7</sup> There should be a series of interchanges between agriculture and industry with rising intensity, industry supplying the basic needs of material inputs for agriculture, agriculture feeding back its surpluses for the development of industry and industry supplying back the various consumer goods on which the agricultural surpluses can be spent.<sup>8</sup>

Having emphasised the proper role of agriculture in the economic development of the country, we shall critically examine in this chapter our

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4. Agricultural Policy—First Signs of Action—An article of P.R. Srinivasan in *Financial Express*, dated April 16, 1965.

5. The inter-relationship between agriculture and industry are complex. Agriculture's basic role as supplier of food for the industrial labour force and of many of the raw materials for industry is only element. In most of the developing countries, agricultural exports must provide the bulk of the foreign exchange earnings for the import of the capital goods required for industrialisation. Agriculture releases labour and often finance to industry. The agricultural population provides a market for industrial products, not only for consumer goods but also for a wide range of equipment and materials used in agricultural production.

SOURCE: State of Food of Agriculture 1965. Review of the Second Post-War Decade, F.A.O., p. 6.

6. Foreword—Ashok Mehta in the book of S.C. Jain, *Agricultural Policy in India*, S.C. Jain, Allied Publishers, Delhi, 1965, Ed.

7. The process of economic development and agriculture role in it are better appreciated now than a decade ago. It is gradually being appreciated that there is a complex two way relationship between agriculture and the rest of the economy and that successful industrialisation generally requires parallel progress in agriculture. In addition to its responsibility for the supply of food and raw materials, agriculture makes other contributions to economic progress. It is the chief earner of foreign exchange, needed to purchase the capital equipment for industrial and general development. Agricultural products themselves provide a raw material base for industrialisation. Agriculture must release labour to the rest of the economy and must supply most of the capital for the early stages of economic development.

8. Presidential Address of Ashok Mehta in 1964 to the Indian Agricultural Economics Association.



achievements in agricultural sector and suggest various measures so that the nation's most important industry can be put on sound footing.

### Agricultural Production and Productivity

The country has executed Three Five-Year Plans. During this period there has been a perceptible trend towards more production and better productivity in the agricultural sector. The progress over the years has, however, not been uniform as the influence of weather conditions is writ large on Indian agriculture. But each successive peak has been highest than the previous peak and each successive trough has been less than the previous trough.<sup>9</sup> In the First Plan the lowest level of production was 100.7 [Base: 1949-50 to 1951-52 (average) = 100] which in the Second and Third Plans have been 121.8 and 144.3. In fact, the peak of the previous plan has been the bottom of the subsequent plan. There was satisfactory increase in agricultural production during the first two plans but the same rate of growth could not be maintained in the Third Plan period. Production index which stood at 145.5 at the commencement of the Third Plan came down to 144.3. In a period of 16 years beginning from 1951-52 there has been about 54 per cent increase in agricultural production.

Quantitatively, the production of foodgrains which was about 55 million tonnes at the beginning of the First Plan reached 82 million tonnes by the end of Second Plan. During the Third Plan the highest production of 89.36 million was recorded in 1964-65 and declined in the subsequent two years because of the unfavourable weather conditions. In 1967-68 the production reached an all-time peak of 95 million tonnes and there are reports that during 1970-71 the country may cross 105 million tonne production mark. Among foodgrains group, substantial increase in production has been recorded in wheat, maize and rice while the production of millets, gram and pulses had not recorded a satisfactory growth rate. After 1962-63 specially, their production has become static or has even declined (e.g., gram, bajra, pulses). Production of rice and wheat which at the beginning of the Plan period was 22 and 7 million tonnes reached 39 and 12 million tonnes respectively by 1964-65. Thereafter in subsequent 4 years rice production has become static while wheat production has increased by more than 50 per cent. Production of coarse foodgrains (jowar, bajra and other cereals) and pulses was 17 million and 9.18 million tonnes respectively. There was satisfactory increase in the first Plan and their production jumped to 24 and 13 million tonnes by 1960-61. Since then there has been only marginal increase in case of coarse foodgrains while the production of pulses has actually declined from 12.71 million tonnes in

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9. Inaugural Address by B.R. Mehta to Indian Society of Agricultural Economics, in 1964.

1960-61 to 10.42 million tonnes in 1968-69. Decline in gram production is specially noteworthy as its production after recording a high of 6.25 million tonnes in 1960-61 has gradually declined and stood at 4.31 million tonnes in 1968-69. This decline appears to be due to the fact that wheat cultivation has become more profitable because of its high yield due to the introduction of improved seeds and favourable prices during the past few years. The extension of irrigation facilities in Punjab, Haryana, Rajasthan and U.P. has made it possible to cultivate wheat in areas where gram was previously grown.

Among the non-foodgrains group, there has been very significant increase in the production of cotton, sugarcane, jute and rapeseed. Groundnut production recorded satisfactory increase up to 1964-65 but thereafter its production has shown steep decline. Growth rate in this group after 1964-65 has become static or shown decline which is a very disquieting feature. Production of cotton which was 22 lakh bales reached 57 lakh bales and is thus more than  $2\frac{1}{2}$  times higher. There has also been qualitative improvement as long staple cotton now constitutes over 50 per cent of the output as against mere 15 per cent at the time of partition. Jute production has shown wide fluctuations in response to prices but in 1969-70 an all-time record production of 7 million bales has been achieved as against 2 million bales at the time of partition. Cultivators who migrated from East Pakistan had experience of jute cultivation and proved specially helpful in increasing production.<sup>10</sup> Quality of jute has not improved much and K.R. Damle Committee made a number of suggestions for improving the quality of jute. Production of sugarcane and rapeseed which stood at 60 lakh tonnes (in terms of gur) and 8 lakh tonnes in 1949-50 has been doubled in a period of 20 years. As regards groundnut its production increased from 34 lakh tonnes in 1950-51 to 60 lakh tonnes by 1964-65 but was only 45 lakh tonnes in 1968-69.

In the plantation group, there has been spectacular increase in natural rubber and coffee. The production of coffee which was mere 21,000 tonnes at the beginning of the First Plan reached to 75,000 tonnes by 1970-71. Tea production has also increased by more than 40 per cent and stood at 397 million kgs. in 1968-69. Coffee production has been stimulated on account of increased foreign demand while the growth of indigenous tyre industry has encouraged the production of natural rubber which was more than 90,000 tonnes in 1970-71.

The increased agricultural production has been brought about partly by bringing additional area under cultivation and partly by increasing the productivity of land. There was 14 per cent increase [Base: 1949-50 to 1951-52 (average) = 100] in area under cultivation during the First Plan

10. Study of Jute and Mesta in India Committee on Natural Resources Planning Commission, p. 2.

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period but in the Second Plan the same rate of increase could not be maintained and the index of area rose to only 121 per cent. Since then there has been only marginal increase and the index stood at 124.6 in 1967-68. The increase was possible by bringing more area under double or multiple cropping, reducing the amount of total fallow land and by reclaiming land with the help of Central Tractor Organisation and state tractor organisations.

Increase in area under cultivation has not however been uniform for all the crops. There has been greater increase in area under non-foodgrains as compared to foodgrains. The rate of growth in area between 1949-50 to 1968-69 under non-foodgrains has been 2.19 per cent per annum as against 1.26 per cent for foodgrains. Among the foodgrains group larger increase has been recorded for wheat and maize while sugarcane, jute, oilseeds and cotton have also been benefited by the increase in area. The area under groundnut has expanded considerably and the annual growth rate has been 3.45 per cent. The area under barley and castorseed has on the other hand declined. Because of the success of high yielding varieties of strains, the area under wheat has increased very appreciably. The following table shows the area under some important crops:—

**Area under Principal Crops (Million hectares)**

	1950-51	1955-56	1960-61	1964-65	1968-69
Rice	31	32	34	36	37
Jowar	16	17	18	18	19
Wheat	10	12	13	13	16
Groundnut	4	5	6	7	7
Cotton	6	8	8	8	8
Jute	.57	.70	.62	.83	.52
Sugarcane	1.7	1.8	2.4	2.5	2.4

During the first two Plan period 16.3 per cent increase in production (out of 36.4 per cent total increase) was accounted for by higher yield per acre. Productivity has further increased specially because of the growing popularity of high yielding varieties of seeds. During 1949-50 to 1968-69 aggregate agricultural productivity rose by 1.53 per cent per annum, foodgrains at 1.65 per cent and non-foodgrains crops at .97 per cent.

In the pre-independence period there was greater increase in the non-foodgrain as compared to foodgrain crops. Crop-wise largest increase has taken place in case of wheat, cotton, rice, jowar and tobacco. The following table gives the average yield of some principal crops:—

**Average Yield of Principal Crops (Per Hectare in kgs.)**

	1950-51	1955-56	1960-61	1964-65	1968-69
Rice	668	874	1013	1073	1076
Wheat	663	708	851	913	1179
Maize	547	704	926	1009	997
Jowar	353	387	533	543	523
Groundnut	775	752	745	816	631
Cotton	88	88	125	123	123
Jute	1043	1082	1183	1292	1038

SOURCE: *Eastern Economist*, Annual Number 1969.

Another feature worth noting is that there are very wide differences in the growth of agricultural productivity in different states. Significant increase has been recorded in Punjab, Gujarat and Tamil Nadu but the record of states like Rajasthan, West Bengal, Kerala, Assam and Uttar Pradesh is far from satisfactory. During 1952-53 to 1964-65 the highest growth rate of 4.09 per cent per annum was achieved by Gujarat, followed by Tamil Nadu, Mysore and Punjab. Growth was negative for Assam and Rajasthan. All differences in inter-state productivity cannot be explained merely in terms of natural factors; capital, labour and agricultural practices have also something to do with these differences.

Our performance in agricultural sector has belied our expectations," specially in the Third Plan period. The ideal of self-sufficiency in respect

11. Targets and achievements of production of some important commodities during the plan period.

	Base year 1950-51	I Plan		II Plan		III Plan	
		Target	Achieve- ment	Target	Achieve- ment	Target	Achieve- ment 1964-65
1. Foodgrains (million tonnes)	52.2	62.6	65.8	80.5	79.7	100.0	88.3
2. Oilseeds (million tons)	5.2	5.5	5.6	7.6	6.5	9.8	..
3. Jute (million bales)	3.3	5.4	4.2	5.5	4.0	6.2	6.1
4. Cotton (million bales)	2.9	4.2	4	6.5	5.4	7.0	5.4
5. Sugarcane (Gur) (million tonnes)	5.6	6.3	6	7.8	10.4	10.0	12.3

SOURCE: *Eastern Economist* Annual No. 1965, p. 1337.

But figures for 1964-65 had been taken from 'Agricultural situation in India' Aug. 1965. Data for 1964-65 is not exactly comparable because Government has revised the production figures, with retrospective effect.

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of foodgrains is far from being achieved. We have also to import large quantity of cotton and oils for indigenous consumption. First Plan targets in respect of foodgrains were exceeded and those for Second Plan were nearly achieved. Cotton, jute and groundnut targets fixed in the First two Plans could not be achieved. As regards sugarcane, targets fixed could not be attained in First Plan but production exceeded the targets during Second Plan period. Since our progress during the two plan period was not in keeping with the requirements of the economy, more ambitious targets were fixed for the Third Plan on the recommendations of Ford Foundation Team which submitted its report towards the end of Second Plan. A higher rate of growth was sought to be achieved by allocating more funds to agricultural development. Growth rate on the other hand has been much less as compared to the previous two plans. Targets in respect of all major commodities except sugarcane have fallen much short of our expectations even if we compare the production figures with 1964-65 which has been the best year in the Third Plan period.

If we compare our performance in agriculture with some other countries between 1952-53 and 1963-64, we find our growth rate has kept pace with the aggregate in ECAFE region and the world but countries like Yugoslavia, U.K. and Australia have shown better performance during the period. However, if we compare our caput production, our record reveals a shocking state of affairs. Our caput production began to show a declining trend since the beginning of the Third Plan. It was 106 in 1960-61 and has come down to 102 by 1963-64—a level which was already attained in 1953-54. As compared to this, there has been 6 per cent increase in the caput production in world during the decade ending 1963-64. This fact is sufficient to explain the phenomena of growing imports because per caput agricultural production has failed to keep pace with the rise in per capita income.

Even otherwise our per acre yields are disappointingly low in comparison to other countries. Leaving aside Africa, Pakistan and Burma, our yields in respect of all major crops are much lower than those of the other countries of the world. Our country, which is one of the biggest producers of rice in the world, has almost the lowest per acre yield which is less than 1/4th of Spain and Australia and less than 1/3rd of Italy and Japan.<sup>12</sup> The area under cotton is larger than in any other cotton growing country in the world. The yield per acre, however, is pitifully low at less than 100 lbs. per acre against 604 lbs. in Soviet Union, 512 lbs. in Egypt, 446 lbs. in U.S., 267 lbs. in Sudan and 231 lbs. in Pakistan.<sup>13</sup> Comparative data about yields per hectare in respect of rice, wheat and cotton are given in

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12. *Vide* 77th Report of Estimate Committee Report of the Lok Sabha.

13. *Economic Times*, February 21, 1962.

the table<sup>14</sup> given in the footnote.

The failure to significantly increase foodgrains production during the Third Plan and resulting sharp increase in the food prices resulted in the development and enunciation of a new Agricultural Development Strategy in 1965. However, the first stage of the new strategy pertained to the Intensive Agricultural District Programme in a limited area. In 1964-65, a modified version of the same approach was extended to several other parts of the country in the form of the Intensive Agricultural Area Programme. A major change occurred with the introduction of the high yielding varieties and the programme was taken up on a full-fledged basis from 1966 onwards.<sup>15</sup>

The new strategy focuses on combining high yielding varieties of seeds with a package of complementary inputs concentrating on selected water assured acreages. The aim was to concentrate inputs on highest productivity areas. In addition there were commitments to:

- (a) make available required inputs,
- (b) implement a price policy which is producer oriented,
- (c) re-organise agricultural research into a co-ordinated programme of all-India schemes,
- (d) refocus extension activities,
- (e) extend the distribution of rural credit.<sup>16</sup>

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14. Table showing yield per hectare in ECAFE region and other parts of the world:—

	<i>Rice (Paddy)</i> 1961-62—1962-63 (per 100 Kg)	<i>Wheat</i> 1961-62—1963-64 (per 100 Kg.)	<i>Cotton</i> 1961-62—1962-63 (per 100 Kg.)
China (Taiwan)	33	10	..
Korea	30	13	4
Malaya	25	9	..
Iran }	20	9	3
Ceylon	18	..	..
Indonesia	18	..	..
Burma	16	5	..
Pakistan	16	8	2
India	15	8	1
Japan	52	27	..
Australia	64	13	..
Europe	49	20	..
N. America	40	15	3
L. America	18	13	5
Africa	13	6	3
World total	20	12	3

SOURCE: National Development Perspective of Agriculture in the ECAFE Region—Economic Bulletin for Asia and Far East, 1965.

15. Fourth Plan, p. 114.

16. *Economic and Political Weekly*, March 28, 1970, p. A-8.

The high yielding varieties programme has so far been taken up for wheat, paddy, bajra, maize and jowar. The new strategy has yielded significant results and has stimulated many people to talk about the 'Green Revolution' in India and food self-sufficiency in early 1970's.<sup>17</sup> The most striking success has been achieved in case of wheat and the production of maize, bajra and jowar has also shown slight improvement. In rice the proper HYV seed has yet to be introduced on a large scale, though a beginning has been made recently with the release of 2 varieties named Jaya and Padma.<sup>18</sup>

Opinions about the performance are conflicting. The most optimistic group holds the view that the so-called green revolution is round the corner. On the other hand, doubts have been expressed both about the current performance and the future progress of the programme. The use of the package of practices does not yet seem to be common. The proportion of cultivators using the new seed is a little more than half even in wheat where the progress is greatest. The dosages of fertiliser used are usually much smaller than those recommended. Seed treatment is not as common as it should be. The use of pesticides and inter-cultural practices still has to go a long way.<sup>19</sup> The indifferent quality of extension of work, availability of sufficient volume of credit and of facilities of irrigation are already acting as important constraints.<sup>20</sup> Moreover, the new technology can at present be used only on irrigated lands which constitutes only small part of the total cultivated land. Despite the various limiting factors (several of which can be removed with proper organisation and effort), the green revolution will increase the investible surplus both for the modernisation of agriculture and the growth of non-farm sector.<sup>21</sup>

We shall now critically examine some of the important steps taken by the Government to accelerate the tempo of agricultural development and point out the changes that are necessary to effect a higher rate of growth in this vital sector of the economy.

### Land Reforms

Immediate implementation of land reforms was an important plank in the programme of the National Government. The question of abolishing zamindari and jagirdari system was taken up even before the formulation of First Five-Year Plan. The U.P. Government gave the lead in abolishing zamindari system after paying compensation amounting to 8

17. *Ibid.*, p. A-5.

18. *Economic Survey 1969-70*, p. 8.

19. *Ibid.*, p. 8.

20. *Economic and Political Weekly*, March 28, 1970, p. A-21.

21. Opportunities in the Green Revolution by B.R. Sen—*Economic and Political Weekly*, March 28, 1970.

times the net income and rehabilitation grant. Following the precedent of U.P., zamindari and jagirdari have been abolished in nearly all states more or less on the same pattern. As many as sixty-six legislations have been enacted for the abolition of intermediary tenures and more than 20 million tenants have been brought into direct relationship with the state.<sup>22</sup>

There has however been no reduction in quantum of rent after the abolition of zamindari system. Thus, there was no immediate material benefit to the tenants except that they were saved from the illegal exactions of the zamindars, and had a psychological satisfaction of better status.<sup>23</sup> On the other hand, in some states like U.P., they were persuaded to pay 10 times the amount of rent for acquiring Bhumdhari rights and their meagre resources were further depleted and they were not left with enough capital to effect further improvement in land. Moreover, in anticipation of the agrarian reforms, zamindars, with the aim of extending their 'Sir' lands, undertook the mass eviction of the tenants which had serious repercussion on tenants.<sup>24</sup> Some of the zamindars took to cultivation of their personal land by investing substantial amounts, and helped in raising its productivity to a great extent.

The measures of tenancy reforms relate to (a) regulation of rent, (b) security of tenure, and (c) conferment of ownership. As regards the fixation of fair rent, most of the states have followed the directive laid down in the First Plan, and rents do not exceed 1/4th or 1/5th of the gross produce. However, in some states, statutory rents themselves are on the high side, e.g., in Kerala the maximum rent varies between 1/4th and 1/2 of the gross produce and in Tamil Nadu it varies between 1/3rd to 2/5ths of the gross produce. These wide variations cannot be justified on account of natural differences but depend on strength of contending parties and the general climate of opinion.<sup>25</sup> It is now proposed to bring them down in due course to 1/4th or 1/5th of the gross produce.<sup>26</sup>

For granting security of tenures, the grounds of ejection have been specified in the various enactments but the right of resumption for self-cultivation has created a feeling of uncertainty among tenants. It is now proposed to declare all tenancies non-resumable and permanent (except

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22. S.C. Jain: *Agricultural Policy in India*, p. 122, 1965.

23. A very fine account of the effect of zamindari abolition in U.P. has been given by W.C. Neale in his book, *Economic Change in Rural India: Land Tenure and Reform in U.P., 1800-1955*. Yale Univ. Press, 1962.

24. Land Reforms since Independence, article of A.M. Khusro.

25. 'Agricultural Legislation in India'—Vol. VI (on land reforms). Introduction.

26. Fourth Plan, p. 178.



in cases of landholders who are serving in the defence forces or suffering from a specified disability).<sup>27</sup>

There has also been a considerable subleasing of land. In spite of legislative attempts to curb this malpractice, it is estimated that tenant households constitute 23.56 per cent of the total cultivating households. The proportion is higher in certain states like Bihar, Kerala, Haryana and Punjab.

In many states tenants and sub-tenants were allowed to acquire permanent rights. Most of the tenants have not, however, been able to acquire ownership rights as the amount of compensation, though below market value, is very high, and beyond their paying capacity. It is proposed to complete the programme by the end of the Fourth Plan and some of the State Governments are contemplating to help the tenants by providing financial assistance. The tenants and share croppers who still continue as such are tenants-at-will or are protected tenants. Such tenants and share-cropper constitute 82 per cent of the total tenants. This insecurity of tenure has impeded the widespread adoption of the high yielding varieties. Such tenants should be given effective security of tenure.

Ceiling legislation has not been pursued and implemented effectively and as such has not been able to change the pattern of ownership of land. According to National Sample Survey (8th round: July 1954–March 1955) 1.6% of the households in the villages owned about 27% of the land.<sup>28</sup> Only 964,800 hectares of land had been declared surplus and about 6,40,000 acres have been taken possession of by the state governments. Further there is a large gap between the area taken into possession and the area distributed. Many of the landowners in anticipation of the ceiling legislation either partitioned their holdings in the names of their relatives or friends or sold a part of their land.<sup>29</sup>

Except in U.P., M.P., Maharashtra and Gujarat, the work of consolidation of land holdings has also not made satisfactory progress, due to lack of enthusiasm on the part of the states and lack of trained personnel.

More than two decades have passed since the country gained Independence, yet the land reform measures have not been fully implemented and in some states even correct and up-to-date land records are also not available. This has been clearly admitted in the Fourth Plan which admits that there are many gaps between objectives and legislation and between the laws and their implementation. Land Reforms Implementation Committee of the

27. Fourth Plan, p. 177.

28. The National Sample Survey. Publication No. 10, p. 12.

29. A very nice discussion on imposition of ceiling on land holdings is given by Grigory Kotovsky in his book, *Agrarian Reforms in India*, published by People's Pub. House, 1964, pp. 83-111.

National Development Council in its report found the progress slow in several states and recommended measures for expeditious implementation of the land reform legislation. The Fourth Plan also aims to ensure that land reforms became a reality in the village and the field. It needs hardly be emphasised that prevailing uncertainty comes in the way of increased production.<sup>30</sup>

### Irrigation

In keeping with the old tradition, the Government decided to extend irrigation facilities for achieving higher agricultural output. Out of 545 major and medium irrigation projects undertaken since the beginning of the First Plan, 325 projects have been completed and an additional irrigation potential of 24 million acres from major and medium irrigation projects has been created. With the completion of projects in hand, another 22.5 million acres of potential will be created. A sum of Rs. 1,923 crores has been spent up to 1969-70 on these projects since the beginning of the Plan. Even so at the beginning of the Fourth Plan, only a third of the usable flow is being utilised. The table below shows the irrigation potential created and its utilisation:—

<i>At the end of :</i>	<i>Gross area (in million Acres)</i>	
	<i>Potential</i>	<i>Utilisation</i>
First Plan	6.5	3.1
Second Plan	11.4	8.3
Third Plan	17	13.5
1969-70 (anticipated)	24.1	19.6

The progress in extending irrigation facilities has always been behind the targets fixed in every plan. For example, against the Third Plan target of additional 12.8 million acres, the achievement has been nearly half. In the initial years, the problem of inadequate utilisation of irrigation potential was also serious as only less than 50 per cent of the potential created could be utilised. The position has since then improved but even now about three-fourths of the potential is being used. It appears that in certain areas where we have created irrigation facilities, there is normally no need for them because of adequate rainfall and it is only in excep-

30. S.R. Sen Committee on the evaluation of package programme has also pointed out that the prevailing uncertainty about land policy should be removed as it blocks increased production—*Economic Times*, dated 19th May, 1966.

tional years of drought that such facilities may be utilised. The new irrigation facilities have not always yielded benefits commensurate with their costs or with earlier expectations. Several of the major projects were commenced under political pressure without complete investigation. In some cases, canal systems had been badly designed and farmers were not educated in advance for making use of the available water. Of late, there has been remarkable development in the use of ground water resources because of the droughts of 1965-66 and 1966-67 and the development of high-yielding varieties. There has been net addition of 1,75,000 tubewells during the three years, i.e., 1966-69 while the total number of tube-wells at the end of the Third Plan was only 80,000.

The drought conditions of the past few years and the continued food shortages have brought into sharp focus the need for providing greater extension of facilities. The Government of India have, therefore, set up an Irrigation Commission to go into the question of future irrigation development in the country in a comprehensive manner.<sup>31</sup> The commission is expected to submit the report by 1971.

Apart from the extension of irrigation facilities there is need for efficient utilisation of the existing facilities. The success of high-yielding varieties is dependent on timely irrigation and water delivery schedules should be drawn in advance and communicated to the farmers who may plan their operations accordingly.<sup>32</sup> It is also necessary to minimise the loss of water during the conveyance and storage. More attention will have to be paid to the better maintenance of the existing canal works. Adequate attention needs to be given to the problems of water-logging and salinity arising out of the execution of such projects in some areas. Government should also see that existing shortage of steel does not hamper the progress of minor irrigation.

### Community Development Projects

We have already pointed out about the lack of proper leadership in the pre-Independent India who could properly guide the farmers and provide necessary facilities for conducting agriculture on sound lines.<sup>33</sup> The Government, therefore, rightly undertook the community development work in which Government undertook to join the efforts of the village people to improve their economic, social and cultural conditions. In strictly agricultural field the aim was 'to facilitate the diffusion of improved agricultural practices such as increased use of fertiliser and selective use of seeds, methods of cultivation and the planting of products more suitable to local

31. Report of the Ministry of Irrigation and Power for 1969-70, p. 82.

32. 'New Conceptions in Irrigation' by N.G. Dastane in *Economic and Political Weekly*, March 29, 1970.

33. For details see Chapter VI of Part One.

soil and climatic conditions.<sup>34</sup> In fine, community development has been one big attempt to bring about a rapid transformation in rural areas. The Panchayati Raj and Community Development have been integrated following the recommendations of Balwant Rai Mehta Committee. The work was undertaken in selected areas on October 2, 1952 and the whole country was brought under extension services in the Third Plan. The entire rural India has been delimited into 5,265 Community Development Blocks; of these, 672 were in stage I and 2,275 in Stage II as on 30th September, 1969.<sup>35</sup> The rest have completed ten years and passed both these stages. The total number of villages covered exceed 4 lakhs. For the year ending 30th September, 1969, 4.9 million tonnes of chemical fertilisers, 39,382 tonnes of pesticides, and 500,290 tonnes of improved seeds were distributed in these Blocks. Besides, 1.5 million hectares of cultivated area was improved through bunding and terracing. Contrary to earlier assumptions the programme continues on Government initiative and even more so on Government Funds.<sup>36</sup> However, due to rapid expansion, the per block allocations have been reduced from Rs. 22 lakhs in 1952 to Rs. 12 lakhs in 1958—an amount which is insufficient in relation to the needs<sup>37</sup> and thus the expected benefits have not been achieved. Lack of qualified staff was also a source of weakness. The village level worker's lowliness, youthfulness and lack of professional authority along with his divided responsibilities make him least effective in the realm of agricultural improvement.<sup>38</sup> Block officials failed to enlist the active cooperation of village people in the programmes.<sup>39</sup> Further, improved agricultural practices could not develop adequately in the block areas because of the shortage of improved seeds, lack of irrigation facilities, shortage and delay in the supply of fertilizers.<sup>40</sup> The programme has therefore suffered in comparison with expectation put forward and aroused among the people.<sup>41</sup> The extension

34. Paul Albert: *Economic Development*, p. 127.

35. Report of the Department of Community Development for 1969-70, p. 10.

36. Fourth Plan, p. 228.

37. *Vide* article of Dr. D.C. Sancheti, 'Rural Development Programme: How to Energise Them'—*Economic Times*, dated April 3, 1965

38. N.N. Lewis: *Quiet Crisis in India*, 1963.

39. There has been in many cases tendency to inflate the extent of people's contribution and the inclusion of undeserved items as well as excessive valuation of these. In extreme cases, the inflation has been insufficient to enable a project to be executed practically, within the funds, made available by the Government. Evaluation Report, 1960, p. 103.

40. Seventh Evaluation Report in Community Development, P.E.O. 1960, p. 92.

41. Ninety-ninth Report of the Estimates Committee of the Ministry of Food and Agriculture as reported in *Financial Express*, dated April 15, 1966.

services have, notwithstanding severe criticism, proved quite helpful in increasing agricultural production. The Consultative Council on Community Development expressed faith in the community development programmes for the integrated development of rural areas and wanted the states to provide adequate financial resources for the continuance of these programmes. A High-power Commission is also being set up to go into the working of the Community Development and Panchayati Raj institutions on their recommendations.<sup>42</sup>

Because of the various limitations mentioned above, the community projects could not bring about the desired growth in the agricultural output. It was therefore thought that a concentrated and intensive programme, on a somewhat selective basis was essential for creating the massive revolutionary change, necessary to bring about substantial growth in agricultural output.<sup>43</sup> The programme is popularly known as Package Programme and aims at making an all-out effort to raise agricultural output by providing the necessary incentives and facilities and was introduced on pilot basis in 1960-61; in the form of Intensive Agricultural District Programme. A modified version of the same approach in the form of Intensive Agricultural Area Programme was extended in 1964-65 and after to several parts of the country. The programme has been successful in making a large number of farmers aware of the potentialities of the improved seeds, fertilisers, plant protection measures and crop yields have also recorded substantial increase.

### Cooperative Development

The role of cooperatives in the agricultural development of the country was clearly outlined as early as 1928 by the Royal Agricultural Commission who had envisaged that cooperatives should cover all aspects of rural life right from credit for cultivation to the marketing of agricultural produce. But adequate efforts were not made in this direction, and the Rural Credit Survey which submitted its report in 1955 outlined several measures to vitalise the cooperative movement. It envisaged greater association of the Government financially or otherwise. The Committee emphasized the need for increasing the supply of cooperative finance by adequate assistance from the state and linking of cooperative credit with production on the one hand, and marketing and processing on the other. The Committee also made several recommendations for putting the movement on sound footing. Their recommendations were largely accepted by the Government and programmes of cooperative development in the Second Plan were drawn broadly on the lines recommended by this committee.

42. Report of the Department of Community Development for 1969-70, p. 2.

43. I.A.R.P. programmes, an article by N.S. Randhawa.

The aim of the Government policy has been to cover all villages by service cooperatives in addition to providing functional cooperatives catering to the needs of specialised groups. There is to be a net-work of marketing cooperatives, which will also recover cooperative dues and a large portion of the agricultural produce is to be processed under cooperatives.<sup>44</sup> The progress of the cooperative movement, however, has fallen woefully short of the ideal envisaged<sup>45</sup> and the requirements of the rural economy despite the significant progress made in the recent years. About a third of the population has come under the purview of the cooperative movement but the progress has been tardy in the eastern states of Assam, West Bengal, Bihar and Orissa. Cooperative credit provided only 10 per cent of rural credit requirements in the first year of Third Plan<sup>46</sup> and the position has slightly improved since then. Moreover, attention has been concentrated on providing short term loans and the needs of long term finance for carrying out the schemes of drainage, providing medium and minor irrigation facilities, and purchasing equipment and machinery have received little attention.<sup>47</sup> The prevailing opinion is that the cooperative credit movement labours under both external and internal handicaps, among the former being the restrictions imposed on advances by the Reserve Bank to cooperative banks, and among the latter being the inability to mobilise savings, promote thrift and cut down overdues. A large number of societies are non-viable and they continue to clutter up the system. The credit facilities are being grabbed by a few privileged persons<sup>48</sup> and do not reach

44. Community Development through Sahkari Samaj, p. 74, by S.K. Dey, Asia Publishing House, 1964.

45. Progress of Agricultural Credit Societies:

	<i>Beginning of I Plan</i>	<i>Beginning of II Plan</i>	<i>Beginning of III Plan</i>	<i>1967-68</i>
No. of Societies	1.05	1.60	2.12	1.92
Percentage of villages covered	N.A.	N.A.	75	92
Percentage of rural population covered	7	12	24	33
Average membership per society	45	49	80	163
Deposits (Rs. crores)	4.28	7.04	14.59	47.17
Loans advanced (Rs. crores)	22.90	49.62	202.75	429.20
Loan overdue as percent of outstanding	22	25	20	32
Loan per member	44	64	119	153
Working Capital (Rs. crores)	37.25	79.10	273.92	709.22

46. Reserve Bank of India Rural Credit Survey for the year 1961-62, Reported in the *Commerce* of November 6, 1965.

47. *Vide* article of T.R. Sharma: The Strategy of Development Planning, *Commerce*, dated November 6, 1965.

48. This is the view expressed by Two Day Seminar called by the Chief Minister of A.P. in November 1965, reported in *Economic Weekly*, November 20, 1965.

the cultivators who need them most. The Government has introduced all over the country crop loans system<sup>49</sup> recommended by the conference of Registrars of Cooperative Societies held in November 1965 which covers the credit needs in respect of inputs of production. Following the recommendations of the All-India Rural Credit Review Committee, the aim during the Fourth Plan will be to favour the small cultivators and their credit needs will be met on priority basis. For providing long term loans, the operations of land development banks will be strengthened and their loaning policies will be liberalised. Agricultural Refinance Corporation has been set up to supplement resources for long term loans. The total number of schemes sanctioned up to June 30, 1969 involved the outlay of Rs. 182 crores.

In the field of marketing, cooperative societies are reported to have sold produce worth Rs. 525 crores in 1967-68 which is again a small fraction of the total marketable surplus. The important crop being sugarcane which the mills are forced to purchase through the cooperatives. Procurement of foodgrains has also been entrusted to cooperative societies. Cooperatives sold agricultural inputs of the value of Rs. 250 crores in 1968-69 accounting for nearly 60 per cent of the total intake of the fertilisers. But some substantial progress has been made in establishing sugar mills in the cooperative sector, 110 cooperative sugar factories have been licensed out of which 62 were in operation during 1968-69 and produced 12 lakh tonnes of sugar accounting for a third of the total sugar production, and by the end of the Fourth Plan about half of the sugar will be produced in the cooperative sector. In addition, cooperative processing units have been established for cotton ginning, oil crushing, jute bailing, cotton spinning, paddy husking, fruits and vegetable processing.<sup>50</sup> A major venture is the establishment of the fertilisers project involving an investment of Rs. 35 crores by the Indian Farmer Fertilisers Cooperative Ltd.

Despite the acknowledged fact that cooperative solution can be the best vehicle for providing credit and access to fertilizers and other essential supplies and for providing local crop warehousing, the cooperative movement has not been able to secure a firm footing in the rural economy for fostering much rapid growth of the economy. State administrations for the sake of satisfying plan targets have engineered the nominal, formal creation of thousands of new cooperatives with little or no attention to the

49. Under this system a credit is advanced to the farmer on the security of his crop for purchasing inputs. A normal credit statement is drawn up for each member every year indicating his loan eligibility in cash and kind. Thereafter he is able to draw upon according to his requirements and it is not necessary to make an application every time. Loans raised through the credit societies are recovered through marketing societies from the sale proceeds of the crop.

50. Data are taken from the latest two Annual Reports of the Ministry of Community Development and Cooperation.

quality of their programmes which have simply served to discredit the movement as a whole.<sup>51</sup>

### Fertilizers

The Famine Commission 1945 had clearly visualised that organic manures (farmyard manures, compost, bone meal, etc.) would fall short of the potential requirements and had attached great importance to the use of artificial fertilizers for increasing yield. Commission had further emphasized the need to undertake study in respect of most suitable time for the application of fertilizers, about the correct proportions of nitrogen, phosphorous, and potassium for different soils and crops and the proportion in which organic manure should be used along with the fertilizers. Such a study was considered essential for educating the cultivators in their use as most of them were unfamiliar with their use.<sup>52</sup> Despite the recommendations of the Famine Commission, the Government did not attach much importance to this question.

Though the first fertilizer factory at Sindri went into production in October 1951 but the second fertilizer factory at Nangal was commissioned a decade later in 1961. It was only during the Third Plan that the wisdom dawned upon the Government and it fixed the target of producing 8 lakh tonnes of nitrogenous fertilisers. But effective steps were not taken for the implementation of the target and production amounted to less than one-third of target. On the other hand with the introduction of high yielding varieties, the demand for fertilisers spurted and the imports amounted to Rs. 209 crores in 1967-68 against Rs. 23 crores in 1960-61.

In our country the use of chemical fertilizer is probably one of the lowest in the world; 3.5 kg. of chemical fertilizers is used per hectare of land against 270 kg. in Japan, 190 kg. in Taiwan and 175 kg. in Korea.<sup>53</sup> This is sufficient to show the reason of low output in our country. The yield improvement, no doubt, depends on a whole complex of improved practices of which proper fertilizer use is only one, but the response of proper fertilizer is so striking and speedy on production and it has been amply proved even in our own country. With the adequate dosages of fertilisers, we can attain the levels of production attained in the advanced countries of the world.

### Improved Seeds

The importance of improved variety of seeds in raising the produc-

51. *Quiet Crisis in India*, p. 162. N.N. Lewis, Asia, 1963.

52. The above information is based on the Report of the Famine Commission 1945, Vol. I, pp. 146-49.

53. Information based on the 'National Development Perspective of Agriculture in ECAFE Region—Economic Bulletin for Asia and Far East—June, 1965.



tion is well known. The new hybrid seeds in maize, wheat, etc., have been able to help in raising the yield to a very great extent.<sup>54</sup> Even in our country the introduction of Mexican dwarf varieties of wheat and hybrid seeds in maize, bajra and jowar have worked wonders. The production of wheat has been doubled in a couple of years. The progress in the multiplication and distribution of improved seeds has lagged far behind the targets fixed in every plan. Evaluation studies indicate that the proportion of cultivator using improved wheat is a little more than half even in wheat where the progress has been spectacular. In rice and coarse grains, the demonstrations of the higher potential of the new seed have yet to be made on a significant scale.<sup>55</sup> The Seed Review Team (1968) has pointed out the shortage of quality breeders stock, lack of appropriate storage facilities and defective distribution arrangements. Government, seed farmers, National Seeds Corporation and Seed Producers' Cooperatives have been unable to cope with the situation.

### Pesticides

Effective plant protection measures can go a long way in assuring more produce to the cultivator, since pests and diseases cause about 20 per cent loss in production, much of which can be prevented by effective measures. The 19th Estimate Committee of the Ministry of Food and Agriculture came to the conclusion that little has been done all these years to educate the cultivators in general about the importance of pests and disease control and to propagate among them methods and devices to be adopted to secure better results.<sup>56</sup>

### Technological Improvement in Agriculture

The adoption of better farm equipment, sowing of new types of seeds, use of pesticides, commercial fertilizers, change in the ploughing methods representing modern technology are a sine-qua-non for achieving greater output from a given amount of land, labour and capital resources.<sup>57</sup> New technology is cumulative in its effect and the reservoir of technology is always growing. However, a very substantial majority of our cultivators continue to carry on their operations in the traditional way. There is, however, perceptible change since the beginning of the Plan period which is clear from the study of the composition of net capital formation; the

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54. The State of Food and Agriculture—Review of Second Post-war decade, p. 78, F.A.O. Publication.

55. *Economic Survey* 1969-70, p. 8.

56. Reported in *Financial Express*, dated April 15, 1966.

57. Tara Shukla (Mrs): *Capital Formation in Indian Agriculture*, p. 156. Vora and Co., Bombay, 1965.

investment in irrigation and improved implements has increased<sup>58</sup> though the supplies of improved implements and machinery even in 1966 were in very initial stages.<sup>59</sup> Similarly the index of output/input ratio shows only slight change. The index which stood at 88.86 in the beginning of the First Plan (Base: 1920-21=100) rose to 105.60 by the end of Second Plan.<sup>60</sup> Despite some improvement our agriculture remains technologically one of the most backward sectors of our economy.<sup>61</sup>

Adoption of modern technology requires capital, which is not flowing in the agricultural sector to the desired extent. About 5 per cent of the net agricultural income was invested in durable assets during the first two plans, and most of the investment was provided by the Government. According to one study agricultural capital per farm person which stood at Rs. 208.99 in 1949-50 has increased to only Rs. 284.74 (at 1961-62 prices).<sup>62</sup>

### Future Strategy

It would be clear from the preceding discussion that the growth in agriculture has not been in keeping with our requirements because of our failure to have correct planning and gear the administration to implement the measures effectively. It need hardly be emphasised that a much higher rate of growth is imperative if we want to get rid of the food imports and invigorate our economy. Higher agricultural production alone can provide a sound base for our industrialisation and the much needed foreign exchange for the bulk of our imports. The success of Fourth Plan depends, as has been rightly emphasised, on the performance of our agriculture.<sup>63</sup> The rate of increase in production of major commercial crops envisaged is much higher than has hitherto been accomplished.<sup>64</sup> Expect-

58. *Agricultural Economics and Growth* by M.M. Snodgrass and L.T. Wallace. Appleton-Century-Crafts Division of Meredith Publishnig Co., 1964.

59. *Ibid.*, p. 212.

60. Tara Shukla (Mrs): *Capital Formation in Indian Agriculture*, p. 124. Vora and Co., Bombay, 1965.

61. *Vide* the Inauguration Speech of Shri G.L. Mehta in the Indian Merchants Chambers at Bombay reported in *Commerce*, 6th March, 1965, p. 121.

62. *Capital Growth in Indian Agriculture* by K. Ramachandran Nair, Article in *Indian Journal of Agricultural Economics*, Jan.-March, 1965 issue.

63. Fourth Plan, p. 120.

64. Selected Targets of Crop Production:—

	Base Level	Fourth Plan Target
1. Foodgrains (Million tonnes)	98	129
2. Jute (Million bales)	6.2	7.4
3. Cotton (Million bales)	6	8
4. Oilseeds (Million tonnes)	8.5	10.5
5. Sugarcane (Gur) (Million tonnes)	12	15

ed growth rate during the Fourth Plan is 6 per cent per annum against the growth rate of 3 per cent achieved in the previous plans. Further the possibility of extensive agriculture are limited and increased production, therefore, depends on our capacity to cultivate the land more intensively and remove all constraints that come in the way of increased production. We have also to take special steps in increasing the production of those export crops whose demand is increasing at a faster rate and which can have better export potential.

Doubling the growth rate in agriculture is a stupendous task that faces the planners and can be accomplished only if an all-out effort is made to accomplish the targets. Mere verbal devotion will not help. There are, no doubt, some redeeming features. The introduction of high-yielding varieties has opened new vistas of progress and Government is more serious in providing the necessary inputs than has hitherto been the case. Highest yields in rice, wheat, maize, jowar, bajra, etc., have gone up several times with the introduction of high-yielding varieties.<sup>65</sup> Moreover the differences between the average and highest yield are enormous ranging from 4 to 15 times<sup>66</sup> and the best in Indian agriculture does not compare unfavourably with the best elsewhere.<sup>67</sup> These low yields are a boon in disguise for the potential development of our agriculture.

In the matter of agricultural development we have to take a leaf from Japan and China (Taiwan) where the size of farm and the degree of mechanisation are relatively limited. The land-man ratio in Japan is even less favourable than ours (.6 hectare) and the maximum size of holding is also less than that of India. But the value of output per hectare of land is \$920 as against £90 in India.

Till now the advance has taken place in relatively small areas such as Punjab, Haryana, parts of U.P., Bihar, Andhra Pradesh and Tamil Nadu.

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65. The highest yield per hectare during 1967-68 for paddy was 13,898 kg. for IR-8 and 72,350 kg. for China-1,039 varieties. It was 11,580 kg. in the case of wheat, 9,856 kg. for maize and 6,927 kg. for bajra. Prior to the introduction of high-yielding varieties programme the highest yield per hectare obtained for paddy was 2,056 kgs., for maize 1,606 kgs., for jowar 842 kgs., for bajra 725 kgs., and for wheat 1,408 kgs., in 1964-65. *Economic Times*, dated April 26, 1970.

66. V.T. Krishnamachari: *Planning in India*, Orient Longmans, 1961, pp. 191-93.

67. S.R. Sen: *The Strategy of Agricultural Development*, Presidential Address at the All-India Agricultural Economic Conference in Dec. 1959. Published in *Agricultural Situation in India*, Jan. 1960:

Such low yields, although a great disadvantage may in fact be regarded as a boon because of the vast possibilities they open up of raised agricultural output through intensive cultivation. National Development Perspective Agriculture in ECAFE Region for Asia and Far East, 1965—Economic Buletin.

These are islands of prosperity in the vast sea of rural poverty. On regional basis the eastern region has fared badly despite assured water supply. The problems of this area are to be studied more intensively. Rice and jute are the two major crops of this area which have shown insignificant improvement in productivity during the last decade. If we could accomplish the same progress in rice which has been recorded for wheat in recent years, it would indeed be magnificent achievement and would solve our problem to a great extent. Water is no problem as is the case with other areas. Rice which constitutes the biggest crop of our country has received little attention at the hands of our scientists so far. Intensive studies of this area and its crops are essential as this is one of the most fertile areas of the country and human factors are greater impediments than natural factors.

Stagnation in the production of millets, oilseeds, and pulses has brought to the forefront the problem of dry areas which receive insufficient rainfall and crops are mainly dependent on rainfall in such areas. These areas often suffer from drought. Detailed ground-water surveys should be undertaken and minor irrigation should be accorded top priority in such areas by providing cheap electricity, technical and financial help. It would be preferable if some public agency undertakes the development of minor irrigation and arranges to sell water directly to farmers. More suitable crop and cultural practices are to be found out for such areas. There is need to develop drought resistant and short duration varieties.<sup>68</sup>

Important need of the day is the diffusion of new technology to wider areas. The knowledge and use of package of practices has not yet reached desirable proportion. The area under HYV Seed in 1968-69 was less than 10 million hectares and even in this area full use of the technology was not made use of. The dosages of fertilisers were less than recommended and seed treatment was not very common. Naturally the full potential of the increased production could not be exploited. A study of the various impediments should be undertaken with a view to remove them.

One of the most important inputs in the use of new strategy is the use of chemical fertilisers. The use of chemical fertilisers is to be stepped up and side by side, efforts should be made to mobilise all forms of organic manures (green manures, composts, etc.) and better crop rotations should be introduced. The recent stagnation in the demand for fertilisers should be carefully studied and constraints removed.<sup>69</sup> It has been estimated that one-half of the rise in agricultural production in advanced

68. *Economic and Political Weekly*, Sept. 27, 1969, Crucial Aspects of Agricultural Development by H.B. Shivmaggi.

69. F.A.O. team found out in the Asia and Far East the following factors that limited the use of fertilisers:—

countries has resulted from the use of fertilisers. In most of the developing countries, the cost of fertilisers is being subsidised to encourage their use. On the other hand, the Central Fertilizer Pool made a profit of Rs. 433.5 million in the past.<sup>70</sup> Indian farmer has to pay twice as much as his counterparts in other parts of the world.<sup>71</sup> To encourage the use of fertilisers all efforts should be made to bring down the high cost of production in the country and credit should be made available to the farmer for their purchase. A vigorous promotion programme consisting of the effective demonstration backed by adequate soil testing and advisory services is necessary to ensure higher consumption of fertilisers.

The use of improved varieties of seeds is also essential. Efforts should be made to produce sufficient quantity of HYV seeds and bring more area under their cultivation. Continuous research is essential for developing new strains and for maintaining the quality of existing strains. Adaptation of exotic varieties to local conditions and development of new varieties is of fundamental importance to the success of increased agricultural production.

For reaping full benefit of improved variety of seeds and fertilizers it is essential that more pesticides be used. In the post-war years the introduction of organic pesticides of high potency, together with improvement of the equipment and techniques for their application contributed greatly to agricultural production<sup>72</sup> in other countries. But not much has been done in our country in this direction. The use of pesticides has become all the more important as the high-yielding varieties of seeds are more prone to pests. Moreover the new methods of cultivation entail higher cost and cultivator can ill afford to lose his crop. The cost of pesticides and equipment should be subsidised by the Government and the cooperative societies should be encouraged to own such equipment as it may not be possible for every farmer to purchase the equipment because of the high cost of the equipment involved. In view of ineffectiveness of individual ope-

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- (a) uncertain profitability at the farm level of using fertilisers,
- (b) security of tenure,
- (c) credit facilities,
- (d) research and experimental services,
- (e) extension services and managerial skills,
- (f) ignorance of the kinds of fertilizers used,
- (g) non-availability of fertilizers.

70. From the summary of the report of Fertilizer Committee appearing in *Agricultural Situation in India*, Sept., 1965.

71. Vide the speech of Algesen at Indian Institute of Petroleum, Dehradun, reported in the *Indian Express*, 20th March, 1966.

72. *The State of Food and Agriculture*, p. 80. F.A.O. publication.

rations in case of aerial spraying, official plane protection services should be set up which should make agro-aviation arrangements. The cost of these measures should be realised along with the collection of land revenue.

With the success of new technology and the resulting higher income, the demand for farm machinery has increased tremendously. There is acute shortage of tractors and power tillers. More seed-cum-fertiliser drills, power threshers, diesel engines and harvesters are in demand. The need for controlled irrigation has led to the installation of more and more pumping sets and tube-wells. It is of vital importance that such a healthy trend needs all possible encouragement. Liberal imports should be allowed if indigenous production fails to meet the requirements.

The importance of timely and adequate availability of water in the new HYV Programme need hardly be emphasised. Better control of irrigation is possible under well irrigation. Now intensive rather than extensive, scientific instead of traditional, controlled instead of uncontrolled irrigation is required to obtain the best results out of the high yielding varieties.

### Agricultural Research

We have also to assign an important place to agricultural research. Some useful research work has been done by introducing new varieties of seeds of wheat, maize and millets in the country but the progress is far from satisfactory. Dr. H.L. Manning who was invited by the Government to advise on the research and development aspects of long staple cotton found that the standard of cotton cultivation was much inferior on research station than on the fields of progressive growers, and adequate attention was not given for the production of best nucleus seeds. The plant material which was evolved after research has not been properly looked after, with the result that it has now deteriorated to such an extent that it yields only a fraction of what it originally yielded.<sup>73</sup>

The Estimate committee in its 77th Report stated that the progress made during the last 18 years in the evolution of high-yielding strains of rice and in testing the varieties from other countries useful for introduction in India has been slow and halting.<sup>74</sup> Most of the research work has not been beneficial for our agriculture because generally what has been done outside is being repeated for obtaining degrees.<sup>75</sup> There is need for adaptation of the western farm science and technology to the local conditions. There is vast scope for work and study of the significance of differ-

73. *Commerce*, dated 13th March, 1965, pp. 442-43.

74. *Commerce*, dated 15th May, 1965.

75. Article of Dr. T.R. Sharma, 'The Strategy of Development Planning' in *Commerce*, dated 6th November, 1965.

ent farm inputs in relation to their output, for formulating suitable crop practices and pattern based on plant breeding research, agronomic research and farm management.<sup>76</sup> Special emphasis should be laid on the problems of rice, pulses and oilseeds. Problems of dry areas should also get proper attention. There is considerable room for further studies of plant evaporation/transpiration ratios and the economics for improved water management. More work is also necessary for designing simple tools<sup>77</sup> that can be useful for our small farmers. Most of the research work on food and agriculture in the world has so far been directed to the needs of farmers in advanced countries. In this connection views of J.C. Able are worth quoting:<sup>78</sup>

Research workers must pioneer new developments, must think ahead of both farmers and planners and spearhead overall agricultural progress. They must take advantage of agricultural knowledge anywhere in the world, but must know what is worth testing, and adopting locally.

Outlays on agricultural research have been raised in each successive plan but are still very modest in relation to our requirements. Fortunately there is increased emphasis on research and its proper coordination during the Fourth Plan.

There is need of an efficient extension service which may carry the results of research to the farmers and persuade them to apply the new techniques and communicate back the problems faced by the cultivation for further research.

Agricultural education has also not received the due emphasis. The standard of agricultural education up to the school stage is extremely poor and even the standard of education in colleges is far from satisfactory. It is only through efficient teaching institutions at all levels that we can meet the growing needs of extension and research programmes. Refresher courses should be organised for farmers.

The seminar on 'Rural Planning in Developing countries' held in Israel in August 1963 was of the view that there should be proper coordination between research, extension and education. All the three branches can organize exchange of information by visits and excursions, study

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76. *Agricultural Take-off in under-developed Countries* by D.L. Narayan—*Commerce*, Annual No. 1965.

77. In a seminar on Agricultural Productivity organised at Bichpuri, Sept. 1965, a case was made out for designing light machinery and equipment for small Indian farmers. In place of tractor, a light ploughing instrument which can be carried to the field by one man should be developed as auto-cycle has been designed in place of heavy motorcycle.

78. *Vide* speech of J.C. Able from the Report on the Second Rehovoth Conference held in Israel in Aug. 1963, on Rural Planning in Developing Countries, edited by Raaman Weitz.

meetings and courses. In this way each branch would be familiar with the philosophy, aims and programmes of the other.

### **Agricultural Credit and Cooperation**

Professor Leduce gave useful suggestions in the above seminar for making agricultural credit more useful. He was of the view that all types of credit (long-term, medium-term and short-term) should be properly coordinated because each type of loan could be effective if all other types were adequately supplied. Further, link should be established between the grant of credits and the improvement in production and marketing methods. This way, agricultural credit institutions could exert an educative influence.

It is unfortunate that proper studies of the credit requirements of farmers have not been made and adequate efforts have not been made to meet the requirements in a proper manner. Right from the beginning of the First Plan, the emphasis was on providing short-term operational credit. Only a small portion of the funds were provided on long-term basis. Co-ordination of the short-term credit with long-term credit was not done at all. There is need for achieving functional relationship between the two for optimum utilisation.<sup>79</sup>

With the adoption of new technology credit requirements of the farmers have multiplied enormously. Too much reliance should not be placed on cooperatives especially because they are not properly developed in some states. Alternative institutional arrangements are necessary for meeting the credit requirements. Purpose and the effective utilisation of the loan should be the criteria and the requirements of small farmers should be met on priority basis.

Even at the risk of repetition it should be emphasized that the co-operative network needs further strengthening so that the cultivators may be supplied services and inputs at the cheapest possible rate and the agricultural produce may fetch the highest possible price.

### **Agricultural Prices**

While introducing improved technology, the farmer would like to be assured that the additional expenditure involved will not become unremunerative because of price factor.<sup>80</sup> The low prices affect the ability to repay the loan and may eat into his capital so as to affect future productivity of agriculture. The price policy has therefore to be positive and production accelerated otherwise the farmer will not have the incentive for more

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79. Co-ordination of Long and Short-term Finance by C. Dinesh, *Economic Times*, 10th May, 1970.

80. Minimum Price for Farm Produce—Article of Prof M.L. Dant-wala.



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production.<sup>81</sup> All advanced countries have farm support prices to assure reasonable income to the cultivators in advance of the sowing season. However, very little has been done in our country in this direction. The control of agricultural prices has sometimes been motivated by the desire to lessen inflation or to assist the consumers. Only in recent years, the policy of minimum prices as an incentive to agricultural production has been given due recognition and Agricultural Prices Commission has been appointed. It is essential that support prices should be announced in advance and should be adequate enough to create a favourable climate for long term investment.<sup>82</sup>

### Land Reforms

'Land to the tiller' is an old slogan but even after two decades of land reforms, a substantial number of actual tillers do not have the security of tenure on the lands they cultivate. It is not easy to find out the actual extent of sub-leasing but even according to 1961 census nearly 1/4th of the land is under tenancy and in certain states like Kerala, West Bengal and Punjab, the proportion is much higher. Insecure tenants and share-croppers constitute 82 per cent of the total number of tenants mainly in states of Andhra Pradesh, Assam, Bihar, Punjab, Tamil Nadu and West Bengal. The insecurity of tenure has impeded the wide-spread adoption of high yielding varieties. It is essential that a cultivating tenant or share-cropper should have effective security of tenure.<sup>83</sup> Alternatively, the question of regulating lease for long term with proper safeguards should also be considered.

### Crop Insurance

The question of crop insurance is of vital importance in a country like India which is so often visited by droughts and floods. As a result of these calamities, the income of the farmer is reduced and he is left with

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81. A general improvement in terms of trade in favour of agricultural products will increase the real income of the farmer in proportion to the percentage of his output marketed. This may reduce inequality of income between farm and other sectors of the community and may increase incentives to work and to increase production. ECAFE Bulletin 'Role of Agricultural Development in ECAFE Region', 1964.

82. Regarding the stabilisation of jute prices, Patel Committee came to the conclusion that the corrective measures were taken to meet a particular situation caused by increased production and falling prices and were not part of any long term price policy aimed at stabilising prices which is of fundamental importance in improving the quantity and quality of jute. Study of jute and Mesta in Indian Committee on Natural Resources—Planning Commission, 1963.

83. Fourth Plan, p. 177.

hardly any capital to carry on the agricultural operations efficiently for the next few years, and there is serious repercussion on agricultural productivity. The Government is also compelled to spend large sums of money in providing relief to the cultivators. Kumarappa Committee on land reforms also emphasized the need of crop insurance.<sup>84</sup> It is necessary that effective steps be taken to introduce crop insurance.

### Unit of Operation

More than 60 per cent of our farmers have uneconomic holdings as they do not have sufficient amount of land on which they may make both ends meet. These subsistence farmers are a great drag in raising agricultural productivity since they are in no position to innovate because they do not have sufficient incomes to undertake risks. They cannot also save for investment in agriculture which is so necessary for adopting improved technology. With the adoption of new technology some of the marginal farms will become viable if adequate finance is provided in the initial stages. Distribution of surplus land arising out of the ceiling legislation should be done in such a way that uneconomic farms become viable. Land should not be given specially to landless labourers and Harijans who would add to the overcrowding of agriculture. There appear to be two solutions to this problem. Firstly they may be shifted to other occupations. Secondly they may take some other allied activities so that they may have better income.

### Human and Sociological Factors

The attitude of a community to work is also an important determinant in raising productivity. Certain castes like Jats of West U.P., Haryana and Punjab and Kurmis of Farrukhabad are very hard working cultivators and the productivity on their fields is much higher than that of Brahmins in the same area. The contribution of migrant Punjabi farmers from areas now constituting Pakistan has been very significant in the green revolution which has taken place in Punjab and Haryana.<sup>85</sup> There is thus need of an educational programme which may bring about changes in the habits and mental horizons of the people. The speed of progress will therefore depend on the quantum and quality of effort put in to improve the human element.<sup>86</sup>

There is also need for the creation of a peaceful social environment whereby the exodus of educated and wealthy men may be checked from the

84. The valuable recommendations of the committee are contained on p. 153 of the Report.

85. Human Factor in Green Revolution by K.C. Sehgal. *Economic Times*, 8th May, 1970.

86. Participants of 'Rural Planning Developing Countries' held at Israel were unanimous in their opinion that the change accepted by the

villages.<sup>87</sup> This class can provide the necessary leadership in villages and help raising agricultural production.

### Conclusion

We have discussed in the preceding pages the progress made by agricultural sector during the Plan period and pointed out that the achievements have been below our expectations and below the requirements of our nation. The task of accelerating the progress is no doubt stupendous as it involves the organisation and training of the millions of farmers most of whom are illiterate and poverty ridden. But given the will and determination of the Government and people, it is not beyond attainment. In an economy consisting of millions of small peasants, it is the duty of the Government to build the necessary infrastructure for agricultural development, if rapid progress is the aim. Our Government has however failed to pursue the correct policies regarding credit, marketing, prices, etc., which are conducive to fuller development. We have therefore also pointed out the necessary changes which are to be incorporated in our future agricultural planning. It is not merely a question of greater investment in agriculture or of enlarging the supplies of current inputs such as fertilizers, it is at least as much a question of creating the social and institutional conditions within which these peasants will have adequate incentive to raise output and improve productivity of land. The success will be achieved if all the measures are taken simultaneously. Piecemeal attempts will not bring in adequate reward. A thorough overhauling of the administration is necessary if we are to meet the challenge of agricultural development. Further the progress in agricultural sector is dependent on the pace of progress in industrial sector as the supply of key inputs will come from the industries—and the surplus population which is a drag on the agricultural development can be shifted to non-agricultural occupations. The integration of industry and agriculture is needed not only on national level but also on regional level.<sup>88</sup> The recent appointment of Agricultural Commission to study the problems of agriculture is a welcome measure—and reflects the anxiety of the government to accord due priority to agricultural development programme.

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rural elite has the best chance of being adopted as there is natural tendency in rural population to distrust strangers and strange ideas. Changes and new ideas can best be better explained through their own institutionalised communication channels.

87. D.S. Chauhan, *op. cit.*

88. It is true, however, that there is no systematic measure that can solve the problem of agricultural production. The problem is a compound of human, social and technical aspects and the solution must lie in a combination of measures to strengthen the incentives, dissemination of knowledge along modern techniques and provide the means for their utilisation. National Development Perspective of Agriculture in ECAFE Region.

## CHAPTER IX

### INDUSTRIAL PROGRESS IN THE PUBLIC SECTOR DURING PLAN PERIOD

Before the country gained Independence there was virtually no public sector in the economy. The only instances worthy of mention were Railways, Irrigation works, Post and Telegraph Department, Port Trusts, Ordnance Factories, Reserve Bank and a few other undertakings like the Government salt factories and quinine factories, etc.<sup>1</sup> Government investments in all types of undertakings amounted to about Rs. 900 crores in 1947-48, major portion of which was utilised in railways, irrigation works and communications.

The colonial power undertook only such works as were necessary for furthering its interests in the country and did not concern itself with the development of the economy as a whole. Despite the recommendations of the Famine Commissions and Industrial Commission urging the Government to take initiative in developing the economy, Government stuck to its *laissez faire* policy. However, the two World Wars, specially Second World War, by cutting off foreign supplies, impressed upon the Government the need for accelerating the industrial development of the economy. The attitude towards state ownership and management of industries had also changed in England with the formation of Labour Government in 1945.

Meanwhile, there was also considerable change in the world opinion. The theory that the state had no business to enter the field of industry gave way to recognition that the state intervention was legitimate and often indispensable. The movement towards public ownership was quickened during the thirties and forties though the causes of extension were diverse in different countries.<sup>2</sup> Now the public industrial enterprise has become an important and probably an indispensable part of modern life.<sup>3</sup> There is hardly any country today in which the Government is not engaged directly or indirectly in the setting up and management of economic and

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1. N. Das: *Public Sector*, p. 1.

2. *Vide* Article of W. Fried Mann in the book, *Public Enterprise*, edited by A. Hobson.

3. W.A. Robson: *Nationalised Industry and Public Ownership*.

industrial enterprises.<sup>4</sup> The extent of state participation, however, differs from country to country and even in highly industrialised countries of the Western Europe, Government plays a big part in business.<sup>5</sup> The inherent merit of democratic way of life make compromises possible continually in determining the lines of demarcation between the public and private sectors in a way that often combines the best of both the worlds.<sup>6</sup> With a view to achieving rapid development, very substantial increase in the role of public sector has been planned in several developing countries.<sup>7</sup> Most economists and political thinkers are now agreed that in developing countries public sector has a vital role to play not only in achieving the accelerated development but also in providing auxiliary facilities for encouraging the growth of industries in private sector.

The coming of Independence in 1947 brought about a fundamental change in the outlook. There was a desire of accelerating the tempo of development because the National Government had inherited an economy which was not only under-developed but also lacked proper balance between different sectors.<sup>8</sup> Further, there was the desire of the people to give themselves a better deal than the foreigner could have given them. Moreover, the basic overheads of economic development were lacking and

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4. S.S. Khera, *op. cit.*, p. 3. A detailed discussion of state participation in countries like Italy, France, Britain, Mexico, Canada, U.S.A. is given in Chapter 1 of his book, *Government in Business*.

5. Introduction written by T.T. Krishnamachari in Khera's book cited above.

6. Foreword of Dr. T.R. Sharma written in the book, *The Working of State Enterprise in India*, written by Tirth Raj Sharma.

**7. Share of Gross Investment in Gross Domestic Product in Base Year Plan and Planned Share of Public Sector in Gross Investment. (Percentage)**

	<i>In Base Year of the Plan</i>	<i>Planned</i>
U.A.R.	15	65
Pakistan	10	64
Ceylon	14	62
India	11	61
Sudan	10	60
Chilo	13	52
Ghana	21	47
Burma	22	45
Malaysia	12	41

SOURCE: *World Economic Survey* 1964, Part I, p. 33. (U.N. Publication).

8. On the eve of Independence, consumer goods industries dominated the industrial scene. Basic and Key Industries which are so essential for the proper development of the economy did not receive adequate attention. For a detailed discussion regarding the industrial structure of the country and reasons thereof please consult Chapter VI of Book I.

the basic foundations of economic development had to be laid<sup>9</sup> if the country was to make rapid progress. There was, in fact, no alternative to extensive public enterprise for hastening the pace of economic development for raising the standard of living in a comparatively short period of time.<sup>10</sup> Against the background of these factors, National Government formulated its Industrial Policy in 1948. The policy resolution envisaged 'Mixed Economy' wherein certain industries were mainly reserved for development by the state which was also given the inherent right to nationalize any concern or industry deemed essential in the national interest. It was, however, made clear that the efforts of the Government would be mainly directed towards the creation of new industries or undertaking rather than nationalising the existing units in the private sector.<sup>11</sup> The Government thus proposed to supplement the efforts of the private sector rather than supplant it.<sup>12</sup> The inadequate growth of private sector also convinced the people and Government that state will have to increase its participation if rapid development was the aim. New Industrial Policy announced in 1956,<sup>13</sup> therefore, envisaged much greater role for public sector. It was clear that the private sector could not secure necessary finance for undertakings which required heavy investment. It would not also undertake the development of basic industries which had long gestation period but were essential from the national point of view. It was also claimed that the public enterprises could secure foreign collaboration both in terms of skill and capital goods in those basic lines of development which required large capitalisation with much greater facility. This was particularly true of aid from Communist countries. Further, public sector undertakings could also help in greater mobilisation of savings and would augment the state revenues for economic development of the country. Government

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9. S.S. Khera, *op. cit.*, p. 10.

10. Foreword of Dr. T.R. Sharma, *op. cit.*

11. Government policy as regards Nationalisation has not been influenced by any dogmatic consideration and nationalisation has been resorted to under compelling circumstances. Air transport was nationalised because these services were operating at a loss and did not possess adequate capital for modernisation. Life insurance was nationalised because several insurance companies were playing foul with the money of Policy-holders. Imperial Bank of India was nationalised for providing effective machinery for the development of rural banking.

12. Thus the policy of National Government was in contrast to the policy of Labour Government in U.K., where existing industries were nationalised to secure their better working while simultaneously adding to the state revenues. In our country also the working of several industries like jute, cotton and sugar left much to be desired and these industries needed rationalisation.

13. Detailed discussion of Industrial Policy Resolutions of 1948 and 1956 is contained in Chapter I of Book II.

alone could break the monopoly of private foreign capital in certain sectors of the economy where public was ruthlessly exploited. Patents from foreign entrepreneurs could also be secured on more favourable terms resulting in considerable saving of foreign exchange. Auxiliary facilities for the growth of industries in the private sector could also be provided by the Government. There was thus compulsive need for state participation in the industrial development. Public enterprises have assumed a key role in the economy and their performance will now largely determine the speed and effectiveness with which we can achieve our social and economic goals.<sup>14</sup>

The growing importance of public sector can well be gauged from the fact that public investments in organised industry and minerals, transport and communications, major and minor irrigation and power aggregated to Rs. 1,200 crores and Rs. 2,900 crores in the First and Second Five-Year Plans against the corresponding private investments of Rs. 520 crores and Rs. 850 crores respectively during the same period. In the Third Plan public investments amounted to Rs. 4,818 crores as against an investment of Rs. 1,625 crores in the private sector. The relative contribution is expected to grow further in the Fourth Plan in this sector as the Government proposed to invest Rs. 10,200 crores against an expected investment of Rs. 3,550 crores of private sector. As regards the role of public sector in developing organised industries and minerals, Government invested Rs. 1,520 crores during the Third Plan against an out-lay of less than Rs. 60 crores in the First Plan. Public sector investment for the first time exceeded the private investment in industries and minerals during the Third Plan and, in fact, it was about 50 per cent higher than the private investment. During the Fourth Plan it is proposed to invest Rs. 3,928 crores for the development of organised industry and minerals, and the relative contribution of public sector vis-a-vis private sector will further grow up because of the expected investment of Rs. 2,000 crores by the private sector.

A major portion of Government investment has been concentrated for the development of basic industries like iron and steel, machine building and machine tools, transport equipment, fuel, power, fertiliser, atomic energy, etc. By and large, the Government investments have not been influenced by doctrinaire considerations and aim at putting the structure of our economy on sound footing.

### Form of Organisation

After having decided to enter the field of industry in a big way, the important problem that confronted the Government was that of finding a suitable form of organisation for state undertakings which have several

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14. Report of Administrative Reforms Commission on Public Sector Undertakings, p. 1.

peculiar characteristics.<sup>15</sup>

Prior to Independence, state undertakings were managed departmentally, e.g., railways were managed by the Railway Board. Even after Independence, Integral Coach Factory at Perambur and Chittaranjan Locomotive Works were being managed departmentally. It was, however, felt that departmental organisation could not be suitable for the management of commercial and industrial undertakings as neither the routine nor the training of civil service was adapted to these new tasks which were often specialised and highly technical. Departmental organisation lacks the flexibility and initiative so essential for the success of commercial undertakings.

Industrial Policy Resolution 1948, following the British example, stressed that such undertakings should be organised into Statutory Corporations which would be possessed of the flexibility and initiative of private enterprise and at the same time would be responsible to the public through Parliament. A number of Corporations were established in 1948 and thereafter for managing undertakings set up under the various Acts of Parliament and State Legislatures; important among them being Industrial Finance Corporation, Damodar Valley Corporation, and Life Insurance Corporation. These Corporations have a dual purpose. In their commercial and managerial aspects, they resemble commercial companies. But in so far as they fulfil public tasks on behalf of Government and Parliament, they are public authorities and are under their control within the limits defined in the Statute.

Of late, however, 'the company form has come to be regarded as the most popular device for the management of commercial and manufacturing activities of the Government';<sup>16</sup> specially 'the device of private limited company has been claimed to be conducive to combining what is best in business with what is best in public service.'<sup>17</sup> It is easy to form the company by complying with the formalities of the Companies Act and this form offers the facility of evolving flexible arrangement as regards capital

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15. According to S.S. Khera, Public Undertaking possess some peculiar characteristics. First, their newness; the state has entered the field of industrial activity in a big way only during the past decade; second, they tend to be large in size; third, the conglomeration of variety of undertakings established within a short period; fourth the entry of the state into the field of economic activity has been marked by a great deal of experimentation in the form, content and methodology of management; fifth, public undertakings are influenced and bound in direct ways by the policies, but as it evolves and develops; sixth, the resources for public undertakings are derived and applied in rather different ways as compared to private enterprises.

16. S.S. Khera: *op. cit.*, pp. 135-36.

17. Annual Report of the Ministry of Production for 1952-53.



and managerial structure.<sup>18</sup> The association of private capital and managerial expertise is very much facilitated under this form. There is no need to draw upon the valuable time of the legislature in getting the floatation approved or getting its approval for carrying out amendments. So great has been the popularity of this form of organisation with the Government that even enterprises of non-commercial nature have been organised into companies, e.g., National Industrial Development Corporation, etc.

However, the controversy regarding the suitability of company form for state-run enterprises has not yet been finally resolved. There is considerable body of opinion which does not look with favour upon the suitability of this form of organisation. Estimate Committee in its Eighth Report on page 5 recommended that wholly state owned public undertakings should generally be in the form of Statutory Corporation and company form should be resorted to in the exceptional circumstances.<sup>19</sup> Administrative Reforms Commission has also endorsed these views and listed the various advantages the form of Statutory Corporation has as compared to company form.<sup>20</sup> A former Auditor-General of India had commented that the company form was a fraud on the Companies Act and on the Constitution. Moreover, as the practice obtains today, the public undertakings in the form of company organisation are run on lines analogous to departmental undertakings with the added differences that they are less accountable to Parliament.

### Governing Boards

Whatever form the public enterprises may take the success depends on the quality of the Boards responsible for their management. Robson has, therefore, rightly observed.<sup>21</sup> 'All the experience we have so far had of nationalised industries serves to emphasise the crucial importance of the governing boards. The success or failure of nationalisation is indeed likely

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18. Ramanadhan V.V., *The Structure of Public Enterprise in India*, p. 169.

19. The Estimate Committee recommended the use of Company form of organisation in the following circumstances: (a) when the state may have to take over an existing enterprise in emergency, (b) when the state wishes to launch an enterprise in association with private companies, and (c) when the Government wishes to start an enterprise with a view to transfer it to private management.

20. Report on Public Undertakings, p. 13.

"Statutory Corporations are set up after full public debate and with the full approval and sanction of Parliament. This leads to a clear and precise definition of their objectives and obligations. It also results in a clear demarcation of powers between the Government and the public undertakings."

21. *Problems of Nationalised Industries*, 1952 Edition, p. 91.

to depend more on the quality of the Boards directing the public corporations than on any other single factor.' Boards should be vested with sufficient powers which are necessary for efficient functioning and there should not be any outside interference in day-to-day administration.

Gorwala Committee which was appointed in the initial stages of the establishment of public enterprises made two important recommendations in this regard which have been endorsed by several other committees and seminars. First, the composition of the Board should not be such as to obscure autonomy; the essential condition of autonomy is that it should not give rise to overlapping of responsibility or result in the introduction of control and interference from the backdoor. Second, 'the composition of the Boards should be such as to subserve only one purpose that of good and efficient direction in the public interest.'<sup>22</sup> In order to ensure continuance of policy, it is necessary to obtain stability. The Boards should not change with the change of minister. The Parliamentary Committee on Public Undertakings in its Report on Fertiliser Corporation urged the Government to lay down some broad principles regarding the strength and composition of the Board of Directors of Public Undertakings for the guidance of ministers. It further urged the appointment of more whole-time members on the Boards than has been hitherto possible.<sup>23</sup> The Commission has, therefore, recommended that there should not be more than 2 part-time Government representatives who should represent the Government as a whole and not any one Ministry. No officer of a Ministry should be made Chairman of any public undertaking. The Commission has also commended the inclusion of some outsiders with established reputation so as to enable the Board to view the proposals with a broader outlook. Administrative Reforms Commission has also been constrained to observe that there has been too much official representation and too little of technical talent.<sup>24</sup>

### Industrial Progress in the Public Sector since Independence

Before reviewing the growth of public sector in different types of industries, it should be made clear at the outset that by and large only Central Government has taken up the initiative in starting industrial units since Independence. State Governments have contributed little funds for starting new industries and have mainly concentrated their attention to the development of road transport, generation and distribution of electric power, financial corporations, etc. As against a proposed total outlay of more than Rs. 1,800 crores for the development of industries and minerals

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22. Sharma and Chauhan: *op. cit.*

23. Para 174 to 186 of the Report of the Administrative Reforms Commission.

24. Report on Public Sector Undertakings, p. 10.

in the public sector during Third Plan, the State Governments spent about Rs. 75 crores in this respect. We shall, therefore, review mainly the progress of Central Government undertakings.

Central Government investment in commercial and industrial undertakings has shown tremendous increase during the Plan period. As against an insignificant investment of Rs. 29 crores at the commencement of the First Plan, investment in 1968 stood at a colossal figure of Rs. 3,333 crores.<sup>25</sup> It is anticipated that by the end of the Fourth Plan, the total investment in these undertakings will amount to about Rs. 6,400 crores. 49 per cent of the amount has been provided in the form of long term loans. Out of the total funds of Rs. 3,333 crores invested as on 31st March, 1968 in these undertakings, Central Government has provided more than Rs. 3,000 crores and the balance has been contributed by State Governments, foreign and Indian investors. Out of the total amount invested so far, only a little more than 5 per cent is invested in those undertakings which are under construction and the rest of the investment has borne fruit.

The following table gives the distribution of the total investment by different industries as at the end of 1967-68:

<i>Name of Industry</i>	<i>Amount (In crores of rupees)</i>	<i>Per cent of total Investment</i>
Steel	1179	35.38
Engineering	833	24.99
Chemicals	350	10.50
Petroleum	378	11.34
Mining and Minerals	273	8.19
Aviation and Shipping	143	4.29
Financing Institutions	7	0.21
Building and Repairing of Ships	18	0.54
Trading	71	2.13
Miscellaneous	81	2.43
	<u>3333</u>	<u>100.00</u>

In order to assess the regional dispersion of investment, data have been collected on the basis of investment in gross block. A perusal of the data shows that Eastern region (43.4 per cent of the total investment) and Central region (21.7 per cent of total investment) have been the biggest beneficiary of Government investment while the Northern region has been neglected, receiving less than 2 per cent of the investment. The Western region has also got less than 6 per cent of the amount invested. State-wise the highest amount has been made in Madhya Pradesh (Rs. 518.2

25. Bureau of Public Enterprise: *A Handbook of Information on Public Enterprise*, 1969.

crores) followed by Bihar (Rs. 470.7 crores), West Bengal (Rs. 403.3 crores) and Orissa (Rs. 391.5 crores). Major investment has been made in region which was hitherto backward and under-developed. It is likely that this region may become the Rhur of India one day. As regards the Fourth Plan investments, it is anticipated that Bihar will be allotted the maximum amount because of the setting up of Bokaro Steel Plant and Maharashtra will be the next highest beneficiary. Government investment in Rajasthan will also be substantially stepped up.

The heaviest investment of about Rs. 1,100 crores (representing about 30 per cent of the total investment in industrial and commercial undertakings included in the above 1968-69 report) has been made in Hindustan Steel Limited. This company is entrusted with the task of running Rourkela, Bhilai and Durgapur Steel Works besides coal washeries, alloy steel and fertiliser plant. Originally each of these plants was conceived to produce a million ton of steel. Their production capacity have been further expanded to 1.8, 2.5 and 1.8 million tonnes respectively.

During the Fourth Plan, the capacity of Bhilai Plant is to be raised to 4.2 million tonnes in two phases. Though the expansion programme of all the three plants has been completed but the production has not yet reached the capacity. In fact the production of Durgapur plant has fallen below 1 million tonne level which it has attained in the earlier years. Durgapur is the sick baby of Hindustan Steel Limited and its performance is not likely to show significant improvement in the near future because of serious labour trouble. Progress of Bhilai in recent months has been assuring and it is expected to reach 90 per cent of the capacity by 1970-71. There was inordinate delay in commissioning these plants and they are not likely to reach the targeted capacity<sup>26</sup> in the near future. The plants produce billets, wide and heavy plates, H.R. and C.R. sheets, coils, electrolytic tin plates, galvanised sheets, heavy rails, wire rods, fish plates, wheels and axles and merchant sections. Their product-mix has not, however, been well planned considering the market requirements. As a result there was surplus production of pipes, rails, fish plates, wire rods, wheels and axles, etc., while the country had to import at huge cost flat products, alloy and special steels. Imports exceeded Rs. 90 crores in 1967-68 while the surplus production of rails, heavy structurals, pipes, etc., had to be exported by H.S.L. to other countries earning foreign exchange of Rs. 140 crores up till now. Viewed as a whole, the performance has not been satisfactory. The company earned a small profit in 1965-66 but since then

#### 26. Plant-wise production of steel ingots:

	1961-62	1962-63	1964-65	1969-70
Bhilai	0.79	1.6	1.13	1.86
Durgapur	0.46	0.73	1.01	0.82
Rourkela	0.35	0.70	0.98	1.1

Losses have been staggering and the accumulated deficit at the end of 1968-69 was to the tune of Rs. 137.7 crores. The performance is likely to be better in future because of the buoyancy in demand.

Government also wanted to start one steel plant at Bokaro during the Third Plan period but this was not possible due to difficulty in securing U.S. cooperation in this regard. The collaboration agreement for setting up a plant of 4 million tonne capacity has now been concluded with the Soviet Union and a separate company has been formed to execute this project. First stage of the Bokaro project will be commissioned in the Fourth Plan and will add 1.7 million tonnes of steel ingots. Of late, the demand for steel has picked up resulting in the acute shortage of certain categories of steel. Efforts are, therefore, being made of achieving a capacity of 2.5 million tonnes in Bokaro plant by 1973-74. The performance of existing plants will also be considerably improved by effecting technological improvements and providing balancing equipment. Advance action in respect of the plants to be started in Hospet, Bailadila, Salem and Goa regions is also being taken.

To make up the acute shortage of non-ferrous metals, Government has taken up steps to supplement the efforts of private sector in the production of zinc, copper and aluminium. A zinc smelter of the capacity of 18,000 tonnes has been set up in Rajasthan which draws its ore supplies from Zawar Mines but zinc concentrate had to be imported as the ore supplies were not sufficient and exploratory work has been started to locate more supplies of zinc ore in Rajasthan. It is proposed to double the capacity of the existing smelter and set up another plant at Vishakhapatnam which will work on imported ores. Hindustan Copper Limited is setting up a complex for producing 31,000 tonnes of electrolytic copper and sulphuric acid plant of 600 tonnes daily capacity at Khetri. Two plants are proposed to be set up for the production of aluminium with the technical assistance from Hungary. Koyna plant (Maharashtra) will have a capacity of 50,000 tonnes while Korba plant (M.P.) will produce 1 lakh tonnes of aluminium. An alloy steel plant with a capacity to produce 1 lakh tonnes of ingot steel has also been established at Durgapur with the technical assistance of M/s. Atlas Steel Company Limited of Canada. The plant mainly produces high speed steel, tool and die steel, carbon steel and stainless steel. The present production is 40,000 tonnes but the capacity will increase to 2 lakh tonnes after the expansion.

Government has also taken initiative in the field of producing heavy engineering goods. Heavy Engineering Corporation with an investment of more than Rs. 210 crores (1967-68) has taken up the manufacture of heavy machinery. Heavy Machinery Building Projects, Ranchi, which has been established with Russian collaboration, has commenced production. This plant can supply heavy machinery and structurals to

pig iron plant, coke plant, fertilizer plant and cement plant. The present capacity of the plant is 1,05,000 tonnes of machinery and equipment but the production in 1968-69 amounted to about 13 per cent of production capacity. Foundry Forge Project and Heavy Machine Tools Project have been set up with Czech collaboration and have commenced production but only a fraction of the designed capacity is being utilised. The production in Foundry Forge and Heavy Machine Tools plants amount to 10,082 and 348 tonnes indicating the capacity utilisation to the extent of 7 per cent and 3 per cent respectively. The corporation is the red and incurred loss of Rs. 14.66 crores in 1968-69 bringing the accumulated loss to more than Rs. 40 crores. All the projects of the Engineering Corporation were taken up on unrealistic projections of demand, and it is doubtful whether the full capacity can be utilised in the near future. Recently the activity has picked up because of orders from the Bokaro plant. But the unfortunate part is that the corporation has failed to supply the equipment<sup>27</sup> according to schedule. Out of the 99,000 tonnes of equipment to be supplied, HEC has so far met only half of the commitment.

The Coal Mining Machinery Project was separated from the Heavy Engineering Corporation in 1965, and was entrusted to new company named Mining and Allied Machinery Corporation. Various items of coal mining machinery like conveyors, coal cutters, fans, pumps, loaders, etc., are being produced but there is inadequate demand of the type and design of products turned out and as such the production in 1968-69 amounted to about 4,000 tonnes of machinery against the designed capacity of 26,000 tonnes. The losses of the corporation exceeded the paid up equity capital in 1968-69. Bharat Heavy Plates and Vessels Limited has commenced partial production in Vishakhapatnam with Czech collaboration for supplying equipment to fertiliser, petroleum, petro-chemical and heavy chemical industries. 23,000 tonnes of equipment will be produced when the company attains full production but the fate of this project cannot yet be projected with certainty. Triveni Structurals Limited, Allahabad, and Tunghbhadra Steel Products Limited, are engaged in manufacturing equipment for irrigation and power projects.

Heavy Electricals Limited is running a plant at Bhopal for manufacturing power transformers, switch gears, control gears, industrial motors, power capacitors, steam turbines, water turbines and railway traction equipment. Total sales in 1969-70 were of the order of Rs. 25.5 crores against the target of Rs. 36 crores and resulted in a loss of Rs. 7.76 crores. Total loss incurred so far amount to a staggering sum of Rs. 55 crores. The Corporation has been suffering from serious labour trouble since its inception. Order position at present is satisfactory in respect of transformers,

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27. *Financial Express*, Oct., 21, 1970.

switchgears, industrial motors, for which production techniques have been well developed.

As Heavy Electricals Limited faced a lot of managerial and administrative troubles, the execution of 3 other projects was entrusted to Bharat Heavy Electricals Limited, incorporated on 13th November, 1964. Heavy Power equipment plant at Ramchandrapuram and High Pressure Boiler Plant at Tiruchirapalli are being set up with Czech collaboration for producing steam turbines, turbo alternators and boilers; while Heavy Electrical Plant at Hardwar will produce industrial and electric motors and steam turbines with Russian collaboration. All these plants have commenced production. The annual sales at capacity production in all these plants are estimated at Rs. 76 crores. Bharat Heavy Electricals Limited has also concluded an agreement with M/s. ASEA Limited of Sweden for setting up a plant near Hyderabad for the manufacture of air blast circuit breakers. About a third of the capacity is being utilised because of the lack of demand and shortage of components. It is intended to diversify the production pattern to utilise capacity fully.

Hindustan Machine Tools, Prag Tools Corporation, Machine Tool Corporation of India and Prototype Machine Tool Factory are engaged in the production of machine tools. Hindustan Machine Tools is turning out various types of lathes, milling machines, grinding machines, gears and radial drills. Prototype Machine Tool Factory is also engaged in producing lathes, grinders while Prag Tools Corporation concerns itself with the manufacture of automobile diesel engine parts, railway components and machine tool accessories. Machine Tool Corporation of India has set up a Grinding Machine Tool Plant at Ajmer with Czech collaboration. There is serious underutilisation of the capacity in machine tool plants because of the lack of orders. Bharat Electronics Limited is engaged in manufacturing electronic equipment such as transmitters, trans-receivers, amplifiers, radars and valves, etc., and has replaced imports. A number of factories are engaged in producing precision and mechanical instruments. Performance of Instrumentation Limited is encouraging.

Efforts have also been made to make the country self-sufficient in respect of railway equipment. Chittranjan Locomotive Works and Varanasi Works are producing locomotives while Integral Coach Factory and Bharat Earth Movers Limited are turning out railway coaches, etc. Bharat Earth Movers Limited incorporated on 11th May, 1964 took over railway coach division and earth mover division from Hindustan Aeronautics Limited from 1st January, 1965.

Indian Telephone Industries was established in 1950 for the progressive manufacture of telephones and telephone exchange lines and other transmission equipment. Production of teleprinters has also been well established by the Hindustan Teleprinters which is a successful undertaking.

ing like the Indian Telephone Industries. Apart from meeting the indigenous requirements, both these concerns have successfully established their reputation in overseas markets. Hindustan Cables Limited manufactures various types of cables. All the above factories are meeting the requirements of Posts and Telegraphs department..

In the chemical group of industries, Government has taken up the production of fertilisers, oil refining, antibiotics and other life saving drugs, insecticides, salts, sulphuric acid and organic chemicals.

Production of fertilisers was planned by the Government on the recommendations of Foodgrains Inquiry Committee and a factory was completed at Sindri in 1950. Since then a number of factories have been set up to boost the production of fertilisers for increasing agricultural production. At present 8 factories in public sector having installed capacity of 6,72,000 tonnes are in production. Fertiliser Corporation of India at present is managing 5 operating units at Sindri, Nangal, Trombay, Gorakhpur and Namrup. Rourkela unit is being worked by Hindustan Steel while Neyveli Lignite Corporation controls Neyveli plant. Since July 1963, the control of Fertilisers and Chemicals of Travancore Limited has also passed on to the Central Government. The capacity of this company is being raised from 70,000 tonnes to 92,000 tonnes. In addition the Cochin Project has been entrusted to this company. However, the Fertiliser Corporation of India is the main organ concerned with the production of fertilisers. The corporation is executing Barauni and Durgapur projects and recently all the three coal based fertiliser projects to be started at Ramagundan (Andhra Pradesh), Korba (Madhya Pradesh), and Talchar (Orissa) have also been entrusted to the Corporation. For Tamil Nadu project, a separate company named Madras Fertilisers Limited has been formed as this is a joint venture with a subsidiary of Standard Oil Company (U.S.A.). Production in this factory is expected to start in 1971 with completion of projects under implementation. Fertiliser production capacity will rise to 1.6 million tonnes and when the other 4 projects which are approved in principle are also implemented the capacity in public sector will exceed 2.4 million tonnes. Performance of Sindri and Trombay units of F.C.I. and Rourkela Fertiliser Plant has been far from satisfactory as production has been much below the capacity. It is only the Nangal factory whose working has come up to expectations. Sindri rationalisation scheme has been taken up and with its implementation, the performance of Sindri unit will improve considerably.

Government miserably failed in attaining Third Plan targets of fertiliser production<sup>28</sup>; so essential for the country which is facing recurring food crisis. Fertiliser Corporation of India has failed the nation, as it

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28. The Third Plan target of fertilisers production was fixed at 8 lakh tonnes; as against this the production amounted to 2.32 lakh tonnes.



has not been able to produce enough fertilisers and the country had to spend enormous amount of foreign exchange in importing fertilisers. In 1967-68, imports exceeded Rs. 200 crores. Profitability of Fertiliser Corporation of India has been much less as compared to other units in the private sector and what is most unfortunate is that it could not work even to its targeted capacity; not to speak of the higher cost at which fertilisers have been produced. It is only recently that Government has taken up the programme of boosting fertiliser production in all earnestness but cost of production is much higher than the cost of imported fertilisers.<sup>29</sup>

Government also entered into another new field which was so far the preserve of the foreign interests, viz., producing and refining of mineral oil. Demand for oil was increasing at a tremendous pace resulting in the drain of valuable foreign exchange and therefore intensive efforts were necessary to locate more oil in the country itself. Oil India Limited (in which Government of India and Burmah Shell Oil Company are equal partners) was granted mining lease over an area of 1,200 km. in East India and had completed a total of 272 development wells up to December 1969. It is producing about 3 million tonnes of crude oil which is being supplied to Gauhati, Baruauni and Digboi refineries. Oil and Natural Gas Commission is, however, the principal organisation to plan, promote, organise and implement programmes for the development of petroleum resources. Up to 1969, the Commission had drilled a total of 761 wells of which 430 are oil and gas bearing. The Commission has reached a rate of 3.7 million tonnes per year in Gujarat and Assam. However, the work of Oil and Natural Gas Commission has not been satisfactory as the target of work has lagged far behind.<sup>30</sup> The Commission has secured exploration rights in Iran in collaboration with some foreign firms to make up for the deficiency of indigenous production, and the oil has been struck in Rostam and another adjacent structure about 17 kms. north-east of Rostam. Strenuous efforts are being made to locate more oil to make up the deficiency of indigenous production. Exploration work has also been taken up in the off-shore areas of the Gulf of Cambay.

Three Refineries at Gauhati (Assam), Barauni (Bihar) and Koyali (Gujarat) have been established in the public sector and commenced pro-

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29. Shri O.V. Algeson in his speech at Indian Institute of Petroleum pointed out that our farmers have to pay for fertilisers twice as much as is being paid by their counterparts elsewhere. *Indian Express* dated 20th March, 1966.

30. During Second Plan period only 51 per cent of the target was completed for deep drilling, while the original target of drilling 611 wells for Third Plan had been revised downwards to 480 wells. Up to 30th April, 1964 only 227 wells had been drilled.—Information based on Third Lok Sabha Report on the working of Oils and Natural Gas Commission, pp. 7-9.

duction and achieved a throughput of 6.25 million tonnes of crude oil in 1969. Barauni refinery could refine only 2 million tonnes of crude oil against its capacity of 3 million tonnes because of the paucity of oil. Cochin refinery has been set up in collaboration with Phillips Petroleum Company of U.S.A., while Madras Refinery has been set up in collaboration with National Iranian Oil Company. Each of these has a designed capacity to refine 2.5 million tonnes of crude oil. Work has also been taken up to establish Haldia Refinery which will have a designed capacity of 2.5 million tonnes per year and will also produce 2 lakh tonnes of lube base stocks. Government is also actively considering to set up a refinery of 2 million tonnes capacity in Goa for utilising its share of Rostam Crude, as it has been difficult to find buyers for this type of crude. With the commencement of production in these refineries, Government has at present a refining capacity of 11.5 million tonnes and established a dominant position (57 per cent of the Indian market is supplied by I.O.C.) in a field which was up till now being entirely monopolised by foreign interests who exploited the country by charging excessive price.<sup>31</sup> As a result, the foreign refineries have begun to grant concession in prices and have become more amenable in their attitude.<sup>32</sup> The credit for such a farsightedness must rightly go to Shri K.D. Malaviya, the then Minister for Petroleum. Government has also taken up the distribution of refined imported petroleum products from rupee payment sources. Indian Oil Corporation has been entrusted with the refining and marketing of mineral oil so as to secure effective coordination and control. In 1969-70 Indian Oil Corporation marketed 10 million kilolitres of petroleum products and its marketing participation was greater than that of all the foreign companies.

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31. Damle Committee appointed by Government pointed out that the prices charged by the Oil Companies for petroleum products were higher than U.K. prices, while the cost of transportation of the crude oil was lower.

The price of aviation spirit excluding taxes was Rs. 1.97 per imperial gallon in Bombay as against Rs. 1.43 per gallon in London.

We also find nice discussion of exploitation by the foreign oil companies in India in *Independence and Oil* written by Y. Yershov, a U.S.S.R. publication of 1965. He points out that major oil companies of U.S.A. and Britain make considerable discounts off posted prices to importers in Europe and Japan while these discounts are not made available to India. Cost of refining charged by these companies is double the figure for the industrialised countries. In 1961, these companies made a profit of 42.5 per cent on their capital.

32. With the establishment of refineries in public sector with Russian and Rumanian Collaboration, these foreign oil companies have begun to offer more liberal terms for collaboration with the Government. They are prepared to accept minority participation and do not insist on receiving crude oil from their own sources. They are also prepared to reduce their refining costs gradually.

Its sales amounted to Rs. 234 crores. But the brilliant performance of the Cochin Refinery has not been matched by any public sector undertaking and it declared a maiden dividend of 21 per cent. The profitability of this company which is being managed in consultation with the Philips Petroleum Company should serve as a model for Indian Oil Corporation. Two lubricating oil blending plants have been established at Bombay and Calcutta in August 1964, by Indian Oil Blending Limited. This company is a joint venture of the Indian Oil Corporation and Mobile Petroleum Company Incorporated. There are three plants at Bombay, Madras and Baranuni to produce base stocks for final lubricants. Lube India Limited has been set up and will meet about 50 per cent of the requirements. Lubrizol India Limited produced additives needed for lubricants and grease. A new Corporation named Indian Petrochemical Corporation Limited has been entrusted with Aromatic Project and the Naphtha Cracker Project in Gujarat. Aromatic Project will produce orthoxylene, dimethyl terephthalate and mixed xylene while Naphtha Cracker Project will produce a number of chemical intermediates which help inter alia in the production of synthetic rubber, and acrylonitrile. Details in this regard are being worked out.<sup>33</sup>

Among the medicinal group of products, Hindustan Antibiotic Limited started production of penicillin at Pimpri factory in 1955 with the financial and technical assistance of UNICEF and WHO. Production of penicillin which amounted to 9.8 million m.u. in 1956-57 reached 55.78 million m.u. by 1968-69. Later on, the production of streptomycin salts was also taken up and its production amounted to 70 tonnes in 1968-69. The company has been successful in developing a new anti-fungal drug named Hemycine. Steps are being taken up to produce 125 tonnes of Vitamin 'C' and 2,000 kgs. Neomycin sulphate per annum. The performance of this undertaking has been satisfactory. As against this, the record of Indian Drugs and Pharmaceuticals Limited presents a depressing picture. The undertaking took up 3 projects for producing antibiotics, synthetic drugs and surgical instruments at Rishikesh, Hyderabad and Madras. Antibiotics like penicillin and streptomycin sulphate are not up to standard while synthetic drugs like phenacelin, sulphanilamide, sulphagunadine, sulphadimidine, etc., being produced cannot stand competition with imported drugs of similar nature. Similarly, surgical instruments produced at Hyderabad according to Soviet specifications are not acceptable to Indian surgeons and their cost of production is much higher. It is no wonder, therefore, that only a small fraction of the capacity is being utilised.

To meet the growing need of D.D.T. for combating malaria 2 factories.

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33. Report of the Department of Petroleum and Chemicals for 1969-70.

have been established at Delhi and Alwayee (Kerala) and production in each plant amounted to 3,000 tonnes in 1968-69. B.H.C. plant has also commenced production at Alwayee. Hindustan Organic Chemicals has taken up the manufacture of 21 organic chemicals and intermediates like acetanilide, sulphuric acid, metoamino phenol, hydrogen, aniline, etc. Production of several items has already started. Pyrites Phosphates and Chemicals Limited has taken the work of exploiting Amjhere pyrites for producing sulphuric acid and rock phosphate for manufacturing fertilisers. The company has not yet commenced production.

For the development and proper utilisation of the mineral resources, Government has formed the following corporations:—

1. Neyveli Lignite Corporation has been formed to exploit lignite (resources) deposits estimated at 200 million tonnes. As contemplated in Second Plan, the integrated project envisaged the mining of 3.5 million tonnes of lignite, 250 megawatt power station, a major fertiliser plant for producing 1.52 lakh tonnes of fertilisers and a plant for the briquetting of lignite and a clay washing unit. The Government has so far made an investment of Rs. 175 crores (up to 1968-69). The first stage of the project covering mining of lignite up to 3.5 million tonnes, generating power up to 250 MW. and the fertiliser plant having a capacity of 0.15 million tonnes nitrogenous fertilisers in the form of urea has been completed. Work is going on for increasing the capacity of mine up to 6 million tonnes and power up to 600 MW.

2. National Coal Development Corporation has been entrusted with the task of raising coal in the public sector. The production of coal by the corporation amounted to 14 million tonnes in 1969-70 and is running much below the target fixed in Third Plan because the anticipated demand for coal did not materialise. The Corporation has turned the corner as the profit amounted to Rs. 12.2 million in 1968-69 against a loss of Rs. 7.3 million in the previous year. Performance has further improved since then. Coal is also being raised by the Singreni Collieries Company Limited at Singreni and production amounted to 4 million tonnes in 1968-69.

3. National Mineral Development Corporation Limited is concerned with the implementation of Kiriburu (Orissa), Balidila (Orissa), Donimalai, and Kuder Mirkh (Mysore) Iron Ore Projects in addition to exploiting Panna Diamond and Rock Phosphate Deposits in Mussoorie. Kiriburu Iron Ore and Bailadila Projects have been completed but production has been much below the levels envisaged and contracted supplies could not be made to Japanese suppliers on account of delay in the completion of mechanical ore handling facilities at Visakhapatnam port.

Manganese (Ore) India Limited, Nagpur (Central Government together with the Government of Maharashtra and Madhya Pradesh hold 51 per cent equity shares in this company and remaining shares are being held in C.P. Manganese Ore India Limited, Nagpur) has been formed

for working the manganese mines and in 1968-69 production declined to 2,38,595 tonnes as against the production of 3,86,358 tonnes in 1966-67 because of fall in demand. In addition, 4 coal washeries have been established by Hindustan Steel Limited to supply washed coal to its steel plants and an investment of about Rs. 28 crores has been made in these washeries. The combined capacity of these washeries is 4.8 million tonnes. (Dugda Coal Washery 0.8 million tonnes, Durgapur Coal Washery 0.8 million tonnes capacity, Bhojdia Coal Washery 0.9 million tonnes capacity, Patherdia 1.3 million tonnes capacity). National Coal Development Corporation has also completed the construction of 4 washeries at Kathara, Sawang and Gidi.

Mention may also be made of India Rare Earths Limited which is engaged in exporting minerals useful in the production of atomic energy and exports amounted to Rs. 1.35 crores in 1967-68.

Manufacture and repair of ships is being carried on by Hindustan Shipyard, Mazagon Docks (Bombay) and Garden Reach Workshops Limited (Calcutta). A second ship-yard is being established at Cochin and a provision of Rs. 22 crores has been made in the Fourth Plan for it. A paper mill for the production of newsprint was set up at Nepa in Madhya Pradesh. The mill is producing 100 tonnes of newsprint per day and the plans are afoot to increase its capacity to 75,000 tonnes per annum in addition to setting up another newsprint plant in Kerala of 60,000 tonnes capacity. Production of wrist watches was taken up by the Government owned Hindustan Machine Tools and the production amounted to about 3 lakh watches in 1967-68. The wrist watches have been well received in the country. Requirements of cine-films, X-ray films and bromide papers are being met by Hindustan Photo Films and the requirements of Cine-films are being met in a substantial measure. Besides the Government has also constructed Ashoka Hotel and Janpath Hotel and created several other facilities for attracting tourists though there was no announcement to this effect in either of the Industrial Policy Statements.

In the transport sector, Government made its debut both in shipping and air transport. All the air companies were nationalised and Air India International and Indian Airlines Corporation were formed to operate external and internal services. Indian Airlines Corporation whose operating fleet consists of 7 Caravelles, 14 Viscounts, 3 Skymasters, 15 Fokker Friendships and 24 Dakotas, links up most of the principle centres in the country and also provides services to the neighbouring countries, viz., Pakistan, Burma, Ceylon, Afghanistan and Nepal. The Corporation carried more than 17 lakh passengers while Air India carried about 3 lakh passengers during 1967-68 to 24 countries and earned operating profit of Rs. 5.43 crores. Both the Corporations are making steady progress. Shipping Corporation of India which was formed by merging the Eastern and Western Shipping Corporations has a fleet of more than 70 cargo vessels, including coastal tankers, etc., with aggregate tonnage of 1.25 million DWT. The corpora-

tion is at present operating on all the important sea trade routes and is the technical adviser to the Ceylon Shipping Corporation. Ships aggregating 5 lakh tonnes are on order with the various shipyards. The Corporation has shown brilliant performance and in 1969-70 earned a net profit (after taxes) of 23.5 per cent on capital. It has the unique distinction of being one of the biggest shipping companies in the world.

There has been some rethinking in the Government regarding the lines of production that should be taken up. It has now been decided to lay greater emphasis on the production of consumer goods specially in those sectors where private sector has failed to develop adequate production capacity for meeting the growing requirements. Cement and paper corporations have been set up to supplement the existing production. Scooters, cars and pharmaceuticals will also be produced in the public sector. Besides, National Textile Corporation has been established to take over the sick textile mills from the private sector which can be run profitably ultimately.

The contribution of public sector undertakings can also be judged by the value of production. The value of production has multiplied several fold in the past as most of the concerns have commenced production. In 1968-69 the value of production amounted to more than Rs. 1,400 crores against less than Rs. 900 crores in 1966-67. Steel, petroleum, fertilizers, coal, transport equipment, machines and machine tools account for a substantial part of the production. The potential value of production is much higher as most of these undertakings are not working to full capacity. This is specially true of engineering and electrical equipment, drugs, machine tools and steel units where the production is much below the installed capacity. It may, however, be stated that the contribution of public undertakings in promoting export is quite small as most of these concerns were started with a view to replace the imports. In 1967-68, total exports amounted to Rs. 47.62 crores and another Rs. 65 crores was earned by shipping and air services, etc. A major portion of the export earnings was contributed by Hindustan Steel (Rs. 30.96 crores). Export sales of Hindustan Steel were in the nature of distress sales due to recession and lack of demand for certain items because of faulty planning of product-mix and cannot be regarded as a permanent feature while NMDC is concerned with the export of iron ores, which is not a manufactured commodity. Selection of proper lines of production whose products can command a ready market, along with our capacity to produce goods at competitive prices, can alone help us in pushing our exports which needs must be stepped up.

Industrial and commercial undertakings established by the Central Government are highly capital intensive and have not provided adequate employment commensurate with the capital investment. In 1967-68 about

5.5 lakh persons<sup>34</sup> got employment in 83 undertakings of the Central Government having investment of Rs. 3,333 crores. Similarly, the investment-output ratio is also quite low. Hindustan Steel and National Coal Development Corporation show only a 22 per cent ratio, i.e., for the investment of Rs. 100, the annual production amounts to Rs. 22; while Mazagon Docks, the Hindustan Antibiotics, Hindustan Insecticides show much better ratio at 251, 184, and 157 respectively.

Central Government undertakings excluding Railways and Posts and Telegraphs contributed Rs. 269 crores towards the financing of Third Plan against the target of Rs. 300 crores. During the Fourth Plan they are expected to generate a surplus (Internal surpluses consist of depreciation, plus or minus of net profit or net loss) of Rs. 785 crores.<sup>35</sup> Judging from the present trend of profitability, it is doubtful that they would be able to contribute this much. Data about the working of these enterprises for 1968-69 make a depressing reading.<sup>36</sup> According to the Annual Accounts of the 73 companies there was a total net loss of Rs. 2,838 lakhs and the only consolation being that the amount of loss has been reduced because the loss in 1967-68 was to the tune of Rs. 4,279 lakhs. The biggest amount of loss has been incurred by Hindustan Steel, followed by Heavy Electricals (India) Limited, Heavy Engineering Corporation, Neyveli Lignite Corporation and Mining and Allied Machinery Corporation as is clear from the Table gives on the next page (p. 193).

Thus out of 56 running commercial undertakings 25 concerns incurred losses and 31 earned profits. Out of them, 20 companies declared dividends aggregating Rs. 1,051 lakhs which represented 7.4 per cent of the paid up capital of these companies. But the rate of dividend works to 0.6 per cent on the total paid up of the Central Government undertakings on paid up capital amounting to Rs. 1,626.67 crores. Out of 10 top enterprises the performance of Indian Oil Corporation, and Oil and Natural Gas Commission can alone be considered satisfactory. As against the poor performance of these giant undertakings, the performance of State Trading Cor-

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34. Third Lok Sabha Committee in its report on the working of various state enterprises has pointed out that there has been no scientific manpower planning in several undertakings and there has, therefore, been a surplus staff in these undertakings, e.g., there was surplus staff in Fertilisers Corporation and National Coal Development Corporation. Bureau of Public Enterprises estimated the surplus labour at 15,000 in 1967. Hindustan Steel, Indian Oil Corporation, Heavy Engineering Corporation had lots of surplus labour on their rolls and added to the deficit of these undertaking.

35. According to recent estimates of the Bureau of Public Enterprises on the basis of financial results of first 2 years, a short of Rs. 159 crores is expected in the targeted surplus.

36. Central Government Audit Report (Commercial) 1970, p. 4.

*(Figures in Crores)*

<i>S. No.</i>	<i>Name of the Company</i>	<i>Paid-up Capital</i>	<i>Loss incurred in 68-69</i>	<i>Total loss up to 31-3-69</i>
1	2	3	4	5
		<i>Rs.</i>	<i>Rs.</i>	<i>Rs.</i>
1.	Hindustan Steel Ltd.	557	39.92	162.35
2.	Heavy Electricals (India) Ltd.	50	5.84	43.76
3.	Bharat Heavy Electricals Ltd.	65	3.37	16.45
4.	Heavy Engineering Corporation	100	14.66	40.73
5.	Mining & Allied Machinery Corporation	19.05	6.39	20.16
6.	Neyveli Lignite Corporation	80	2.28	21.85
7.	National Minerals Development Corporation	25.06	1.65	6.28
8.	Hindustan Photo Films Mfgs.	5.82	2.08	4.21

poration of India, Hindustan Teleprinter, Indian Telephone Industries, Bharat Electronics Limited, Cochin Refineries, Hindustan Cables, Indian Oil Corporation, Bharat Earth Movers and Shipping Corporation of India is indeed gratifying and their record can very well be composed to the concerns of similar nature in private sector. Thirty-four companies (31 commercial and 3 promotional undertakings) earned a profit of Rs. 6,455 lakhs which represented 16.8 per cent of the paid up capital of Rs. 384.94 crores invested in these companies. According to the calculations of Audit Report (Commercial) 1970, the return on a total capital investment of Rs. 3,449.17 crores made in 73 concerns worked out to 1.8 per cent of investment as against 1.2 in 1967-68. Here capital investment has been taken to include paid up capital, long term loan and free reserves; similarly return has been calculated not only on the profits disclosed but also included interest paid on long term loans.

Poor performance of these undertakings cannot be simply explained by the fact that they are capital intensive projects engaged in basic industries and have long gestation period. Industrial recession is said to be another contributory cause of poor performance. But a close perusal will indicate that several other causes have been responsible for their poor profitability. Many of the projects specially in engineering and machine tools were not established after carefully considering the demand for such products; with the result that only a small fraction of their capacities is being utilised. But even where there was sufficient demand for sustaining full production, it was not possible to attain capacity because of the poor maintenance of plants resulting from the lack of spares, labour unrest and difficulties in procuring raw materials. Cost of production is also higher because of heavy investment, surplus labour, inadequate inventory control, lack of requisite skills on the part of workers and inefficient management.



For example Fourth Lok Sabha Committee on Public Undertakings in their fifty-seventh report on Sindri unit were constrained to observe that even after a lapse of 17 years, Sindri Unit had not been able to make a firm assessment of the labour requirement and management did not bother about the pilferage of coal until it became rather heavy, i.e., 15 per cent. There were surplus stores worth Rs. 85 lakhs out of which stores worth Rs. 12.03 lakhs had not moved since 1956 and were lying undisposed. According to Bureau of Enterprises there were 15,000 surplus workers in 1967 in public undertakings and the loss on account of their wage bill alone would amount to about Rs. 6 crores per annum.

State enterprises are expected to accelerate the tempo of development and at the same time guide the private sector in the same direction so as to raise the living standard. They have to produce goods and service at the least possible cost to the community and make our economy better balanced so that the dependence on foreign imports in respect of vital items may be considerably reduced. The socialistic objectives of reducing concentration of economic power and providing better amenities and service conditions to the labour force have also to be attained.<sup>37</sup>

Judging the performance of the state enterprises against the background of the above objectives, it may be said that state has taken initiative in establishing enterprises in those basic and key industries which private sector either did not develop at all or at a rate demanded by the planners. The monopoly of foreign interests in the field of mineral oil has also been done away with. Working conditions in state enterprises are also comparatively better than most of the private undertakings but much remains to be done to improve the working conditions. However, public sector has not succeeded to the desired extent in producing goods at lowest possible cost and in accelerating the tempo of industrial development. Further the concentration of economic power has also not been reduced. Inadequate profitability and continued losses in many cases due to lack of proper planning at the initial stage and inefficient management have hampered their further growth and tarnished their image in public eyes.

#### Suggestions for Improvement

Public sector has come to stay and is destined to play the role of leading sector. It is, therefore, no use to run down the public sector. It is also equally true that much remains to be done before it can attain the

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37. Trade Union Congress (England) listed 6 objectives as constituting the purpose of public ownership: (1) Providing the best possible service at the best possible real cost, (2) Improving the wage and conditions of employment for the working people, (3) Attaining a higher degree of equality, (4) Ensuring increased public control over the economic system, (5) Maintaining full and stable employment, (6) Increasing industrial democracy by means of greater opportunities for joint consultation quoted by Rolson in his book on p. 454.

status of a leading sector. It should, therefore, be our endeavour to improve the efficiency of the public sector undertakings to the highest level of attainment and following suggestions are offered with this end in view.

In a country like ours which is so much short of capital, it is imperative that the scarce resources should be used in a manner which yields maximum social benefit. Before committing investment to a particular project, special care should be taken to scrutinise the detailed project report. Only those projects should be implemented where production can be attained at competitive cost and the full capacity of the plant can be utilised. It is no longer secret that many projects were taken up on the basis of fantastic cost estimates and only a small fraction of the productive capacity is being put to use indicating the wastage of precious resources. To take an example, capacity for producing steam turbines was created at Heavy Electricals, Bhopal, but plant could not work for 2 years because there were no orders. Heavy Engineering Corporation and Mining and Allied Machinery Corporation are clear examples of our failure to assess the demand. Anticipated cost of production was also much higher in several instances. What is most unfortunate is that in many D.P.R.'s there was no indication of the anticipated cost<sup>38</sup> and funds were committed to such projects. Fourth Lok Sabha Committee on Public Undertakings has, therefore, rightly observed that in future no undertaking should be launched unless a scientific and accurate assessment of demand has been made and proper scrutiny of the D.P.R. has been made. It may also be pointed out that a project should not be taken up merely because of the easy availability of foreign loans on liberal terms. In fact, the detailed project report should be prepared by the firms of established reputation and in no case, the machinery supplier should be entrusted with the task of preparing feasibility report. Wide variations in the actual cost of production and the cost estimates stipulated in the D.P.R. of several projects also goes to prove that sufficient care was not bestowed in the preparation of these reports.<sup>39</sup> One can be excused if the mistakes were committed initially because of our inexperience; but the important question is that have we learnt a lesson from our past mistakes? Recent report on the Bokaro Steel Project disproves it. The agreement on Bokaro Steel Project with the Soviet Union was rushed through without proper and detailed scrutiny. The cost of production even at 4 million will be much higher than at Rourkela Steel Plant and it is doubtful whether it will become a profit-

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38. Of the 38 undertakings studied, it was found that the D.P.R.'s of 11 undertakings did not contain cost estimate—Sixty-seventh Report on Production Management, *op. cit.*

39. Appendix XI of the Sixty-seventh Report on Production Management shows variation, e.g., the cost of coke at Bhilai Plant was 340 per cent more than the projected cost.

able venture.<sup>40</sup> The question of location of the plant should also be decided on economic considerations and political considerations should not be allowed in taking a decision regarding the location of a project. The size of the plant should be such so that the production can be achieved at the lowest possible cost.

There is also need to guard against possible delays in the procurement, installation and commissioning of plant and machinery<sup>41</sup> and in any case there should not be wide variations. It has been rightly observed that frequent revision in the cost estimates vitiate the basic assumptions on which the project is based. Late commissioning of the plant leads to locking of capital and escalation in the cost of the project. Existence of wide variations in the actual cost and projected cost only proves that either the project report was prepared in a perfunctory manner or the machinery deployed for the execution of the project was not equal to the task. So far there have been inordinate delays in the commissioning of the projects and the targeted date for the completion of the project have hardly been adhered to in any project. In almost all the cases, the cost estimates had been revised upward leading to substantial rise in the cost of production. For example, actual cost of producing ingot steel in the various plants of Hindustan Steel is higher by 130 to 200 per cent over the cost of production estimates given in the Project Reports. To take a recent example, the first stage of the Bokaro Steel Plant will be delayed by 27 months and the cost will be about Rs. 1,090 crores against the estimates of Rs. 707 crores for 4 million tonnes plant in 1965.<sup>42</sup>

There has been general lack of cost consciousness, inadequacy of budgetary planning and of proper cost accounting. There has been inadequate inventory control and existing arrangements for exercising control on consumption of materials are far from satisfactory. Barring a few cases, our production costs do not compare favourably with those of foreign concerns and we are thus not in a position to export goods to foreign countries when there is a slackening of demand in the home market. What is worse is that most of the undertakings do not possess even comparative data regarding the cost of production in other countries. In fact, the question of comparative cost did not receive the attention it deserved at the time of preparing detailed project reports and, in future, it should be ensured that no projects should be taken up where our cost of production is in marked variance with international costs. Import substitution should not obliterate our attention to this vital aspect of the question.

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40. Sixty-eighth Report of the Committee on Public Undertakings, p. 79.

41. Administrative set-up for implementing the projects should be streamlined and geared to the execution of projects in least possible time and within cost estimates provided in the Project Report.

42. *Financial Express*, dated 21st October, 1970.

Public sector undertakings should make concerted efforts to bring down cost of production to fair level by setting the right, the deficiencies in organisation, management and developing cost consciousness at various levels of production. Steps should be taken to instal effective cost control schemes where they do not exist.

The level of inventories maintained is unduly high by any comparison and despite this several undertakings reported loss of production due to shortage of spares and components. Third Lok Sabha Committee on Public Undertakings in its Fortieth Report of materials management recommended that public sector undertakings should strive to bring down the level of inventories to 6 months production by making use of modern methods of inventory control like classification, variety reduction and codification. It, however, appears that not much has yet been done to make use of modern tools of inventory control.<sup>43</sup> It may, however, be suggested that licences should be given liberally and in time so as to obviate the necessity of carrying huge stock of imported items.

Utmost economy should also be observed on the consumption of raw materials and avoid loss due to pilferage. Every undertaking should fix norms for consumption of materials, so that when consumption of materials goes beyond that norm, the management can know of it at once and take immediate measures. To take an example, consumption of coke in steel plants is 900 kgs. per tonne of hot metal as compared to 500 kgs. in Japan.<sup>44</sup>

The constant exercise of leadership of the highest level is of prime importance to the success of public undertakings.<sup>45</sup> The Board should consist of expert persons dedicated to the socialist philosophy and should have more whole-time members to shoulder the increasing responsibility. The functional Directors should operate as a constellation, i.e., as a closely integrated and a knit team, and may be jointly held responsible for the proper execution and management of the project. But even after a lapse of 20 years, Government has not been able to evolve a clear concept about the composition of the Board.<sup>46</sup> In fact, not only the Board of Directors but the entire managerial cadre should consist of persons of proven ability, integrity management talent, initiative and above all faith in the role of the public sector in national economy; otherwise the problems in the realm of production management cannot be satisfactorily solved. It was observ-

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43. Fourth Lok Sabha Committee on Public Undertakings (1969-70), Fifty-Seventh Report, p. 7.

44. Report of the Fourth Lok Sabha Committee on Public Undertakings on Production Management, p. 102.

45. Third Lok Sabha Report of the Committee on Public Undertakings on Fertiliser Corporation, p. 238.

46. Fourth Lok Sabha Report of the Committee on Public Undertakings on Bokaro Steel Ltd., p. 98.

ed that even the highly sophisticated plants and machinery were being operated on obsolete and out-moded techniques of planning, and control of production.<sup>47</sup>

It should be the supreme duty of management to attain the rated capacity and all constraints that hinder the attainment of full capacity should be removed. A separate planning cell in every undertaking or the concern should be set-up which after conducting a market survey assess the demand and production may be planned accordingly. It is rightly felt that had our market research organisation been up to the mark, the programme for diversification of production could have been chalked well in advance to reduce the intensity of recession and gross underutilisation of capacity in many public undertakings could have been avoided. An efficient management would periodically review the product mix to bring it in line with the changing pattern of demand and would foresee the events so as to control them rather than be controlled by them.

Public interest requires that state undertakings should run efficiently. It is not however easy to define efficiency.<sup>48</sup> But organisation of efficiency audit would be a step in the right direction. This can be done at two levels by two different agencies—one internal and the other external. The internal efficiency audit should be organised under the Accounts Department to provide expert staff aid to management while external unit should consist of expert staff from outside and be responsible to the Government.

The Administrative Reforms Commission have recommended the Constitution of Audit Boards for conducting efficiency audit. The audit Boards should include auditors, economists, management engineers, statisticians, etc., to find out (i) whether the various programmes taken up by the undertakings are being executed and their operations conducted economically, and (ii) whether these programmes are producing the results expected of them.<sup>49</sup>

The importance of trained and efficient labour need hardly be emphasised. It should be the constant endeavour of the top management to recruit efficient labour and give proper training for handling the tasks in an efficient manner. There is also the need for developing incentives—financial or otherwise—to encourage improved productivity and efficiency.

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47. Fourth Lok Sabha Report of the Committee on Public Undertakings on Production Management (1969-70), p. 60.

48. 'Sometimes particular improvements can be measured statistically in terms of labour costs, cost of maintenance, fuel efficiency, the amount of capital invested required, productivity, reduced accident rates and so forth. All these measurements may be perfectly valid in their own context—yet these indices, although very valuable as guides to management, will not provide a single overall measurement of the efficiency of a nationalised industry'—Robson: p. 364.

49. Report on Public Sector Undertakings, p. 90. Both these objects have been explained in great detail in the Report of the Commission.

There should be proper manpower planning and the staff management should fix proper norms of work so that no surplus personnel may be recruited.<sup>50</sup> The problem of maintaining cordial relations with the labour has also assumed significance as the production has been severely affected in several public enterprises specially in the Eastern region. There is need for making continuous objective studies of this problem in all the undertakings so as to remove all constraints that hamper the cordial relations. Effective steps should be taken to establish rapport with the workers and create in them a sense of belonging. Unfortunately the subject has not received the attention of the top management which it deserves. The manner in which these issues (the problem of maintaining labour management relation and increasing the productivity of labour) are resolved is of vital significance to the successful performance of the public enterprises.<sup>51</sup>

There is also great need for building suitable cadres for specialised personnel in management, accounting and engineering so that expert persons may easily be available. In spite of the fact that steel and fertiliser industry are well established, the country is still dependent on foreign experts to advise the local technicians on major overhauls and repairs in the public sector enterprises. The improper maintenance of plants and machinery has been an important reason in several cases for not achieving full production. Actual shut down period has been far more in many cases than the limit envisaged. There is also great need for building up suitable cadre for specialised personnel in management and accounting matters like cost experts, financial controllers, etc.

Another lacuna is the lack of adequate attention given to scientific research. So far we have mainly been dependent on foreign technical know-how. It is time that we devote adequate attention to this important aspect so that projects may be planned and executed more in relation to our requirements. Research projects should be chosen from the standpoint of the needs of industry and we should be able to design plants according to our requirements and lot of money paid to foreigners for this work may be saved. It is necessary that research and development organisations should be set-up for one group of industries in the public sector so as to explore newer and better products and processes with particular reference to cost reduction.

At present there is unmistakable trend of grouping of undertakings pertaining to one industry under one company or corporation. But this arrangement does not seem to be conducive for efficient functioning. It would, however, be better if different units are entrusted to separate management and the coordination between them be provided by the concerned ministry. In this connection Robson has rightly observed, 'An effort

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50. Third Lok Sabha Report on the Fertiliser Corporation, p. 238.

51. Report of the Administrative Reforms Commission, *op. cit.*, p. 80.

should be made to discover the optimum size of the operating unit in each instance and to encourage as much emulation between separate undertakings within a nationalised industry or between public and private enterprise within the same industry or service.<sup>52</sup> Published accounts of the state undertakings also show that medium types of undertakings have shown much better performance than giant undertakings.

It is, no doubt, true that profitability alone cannot be a criteria for setting up public sector undertakings and sometimes projects have to be taken up even if there are low profits/losses if they will result in the higher level of economic activity. Total benefit to the economy is more important rather than the profit to the Government treasury. It has, therefore, been rightly urged that Government should enunciate clearly the economic, financial and social responsibility of public undertakings so that they are well understood by the management of these undertakings.<sup>53</sup> Similar view has also been expressed by the Administrative Reforms Commission.<sup>54</sup> But so far, no clear statement has been made by the Government in this regard. The profitability aspect also cannot be totally ignored in the present context of severe shortage of investment resources and need for providing valuable and expanding sources of funds for further re-investment in the public sector. The Finance Minister in his budget speech of 1964-65 reiterated that enterprises in public sector should not only make profits but should give a good dividend to the Exchequer and yet be able to build up resources to finance their own expansion. Judged in the light of these observations the profitability of the public enterprises cannot be considered satisfactory by any measure. There was a total net loss of more than Rs. 28 crores in 1968-69 in 73 concerns included in audit report on commercial undertakings of Central Government (1970).

In view of this, the Fourth Lok Sabha Committee on Public Undertakings (1969-70) in its Sixty-Seventh Report was constrained to observe that the 'Criteria of profitability was getting gradually eroded and whittled down' and urged the Government to emphasise the need to ensure profitability. The Committee further felt that the norm of profitability should be laid down at the time of setting up the project itself. It is time Government should seriously consider the scrapping of enterprises which continue to show huge losses even after their gestation period is over and there is no chance of their production capacity being utilised in the near future or else their product-mix should be diversified so as to command ready market. It needs hardly be proved that an ill-conceived project with production capacity installed on the basis of unrealistic projections will

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52. Robson, *op. cited*, p. 487.

53. *Vide* p. 5 of the Report.

54. Report of Public Sector Undertakings, *op. cit.*, p. 7.

be a source of continuous drain. To ensure higher profitability, it is of paramount importance that all-out efforts should be made to attack the problem of gross underutilisation of capacities in various undertakings. Present sporadic attempts by each ministry will not produce the desired result and it would, therefore, be better if a high-level committee consisting of the representatives of Ministries be appointed to suggest remedial measures.<sup>55</sup>

Last but not the least in importance is the task of creating better understanding in the public about state undertakings. They should not only be run efficiently but also create a better image in the mind of the public. The basic economic and social objectives for setting the public sector enterprises should be explained since the public sector is accountable to the entire public. It is the duty of top management to know the reactions of public about these undertakings and efforts should be made to build their proper image in public mind. It is only recently that this aspect of their operation has received some attention. A conference was held in 1969 to devise the various ways and means for maintaining better public relations. Public inquiries and complaints should be promptly attended to and utmost courtesy should be extended so as to make favourable impression on the mind of the public.<sup>56</sup>

### Future Strategy

The public sector is destined to play a more important role in the future. Government proposes not only to expand the public sector in existing lines of activities but also in those industries which have failed the nation<sup>57</sup> because production has not been commensurate with the growing demand specially industries providing equipment and inputs to agriculture. Government would also further supplement the efforts of private sector in industries like cement, paper, cotton textile, sugar, etc. A word here may not be out of place regarding the directions of future growth of the public sector as investment of vast resources has not always been made in most advantageous avenues either in respect of profitability or in term of social objectives. So far, attention has mainly been concentrated in developing production in those industries where we were mainly dependent

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55. P. 29 of the Report.

56. Sharma and Chauhan, *op. cit.*, p. 234, II Edition.

57. Mr. Harold Wilson in the Annual Party Conference in 1957 explained the meaning of the term 'failing the Nation'. By failing the Nation he meant that industry may be inefficient or it may fail to play an adequate part in the National Export effort, may be unwilling to expand sufficiently in the National interest, may lack drive in investment or there may be bad industrial relations or it may abuse its monopoly power.



on foreign imports and which were supposed to be vital to the growth of our economy. Cost considerations have not been given adequate weight but in future only those projects should be undertaken where our costs do not compare unfavourably with the costs of foreign companies. It is time we give second thought to the problem and try to find out suitable fields for public sector enterprises. A few suggestions may be of value in this connection. Firstly, public sector should try to enter industries which may lead to increase in exports which are at present lagging far behind our imports. Secondly, state should also enter those industries which are earning bumper profits and are the monopoly of a few capitalists. Thirdly, state should take up those projects which are of labour intensive nature, as we are short of capital and have surplus man-power. Such projects can be usefully entrusted to cooperative societies. Fourthly, public sector should try to enter in new and expanding industries rather than in old and contracting ones. Fifthly projects should be initiated in those industries, where there is a clear indication of the demand so that the full capacity may be utilized regularly. Projects should not be conceived simply because of the availability of credit on liberal terms but a thorough cost benefit analysis should be made before funds are committed. Sixthly, the availability of suitable technical and other types of personnel should be undertaken before the launching of the project. Finally units may also be established in such industries where the state has the confidence of giving better account of itself than the private sector. Be it remembered that nothing succeeds like success and therefore the future of public sector depends upon its own success in the future. It is, therefore, of paramount importance that public sector projects should be not only wisely conceived and economically implemented but also efficiently managed.

## CHAPTER X

### INDUSTRIAL PROGRESS DURING THE PLAN PERIOD

We have already discussed the inadequate development of industries during British rule in our country. Capitalist segment of the economy was small and was mainly centered around the port towns and a few other centres. Factory and mining establishments gave employment to a small fraction of the total population and generated about 6 per cent of the net output. Organised industry was unable to absorb the growing population of the country and pressure on agriculture continued to increase. In fine, the development of modern industry did not have any significant impact on the country's economy. Besides, the industrial structure was unevenly developed and the country was dependent for machines, machine tools, mill stores and chemicals and dyes, etc., on imported supplies. Dangers of inadequate development of basic and key industries were most vividly brought out during the Second World War when the imported supplies were either cut off or seriously curtailed. It, therefore, became difficult to maintain production even in the existing industries which were starved of replacements during the war period. The war disrupted progress of the industries but the partition of the country and the economic situation prevailing at that time brought further severe stresses and strains. The result was that production in almost all industries was lower than the peak attained during the Second World War.

Industrialisation of the country was the fond hope of the people and the national leaders had constantly urged colonial power for bringing about rapid industrialisation of the economy. Since it was thought that by industrialisation, the nation could reduce the drain of the country's wealth and bring an era of prosperity and plenty for the masses. Difficulties faced during the Second World War had acted as an eye-opener, and it was obvious that the country could do away with such difficulties only by undertaking programme of massive industrialisation.

As soon as the urgent problems arising out of partition were solved, the Government made a statement on the industrial policy and outlined a series of measures which were to be taken to encourage the rapid growth of the industries into desired directions so that the country may have a balanced economy and may take a place of pride in the comity of industrial nations of the world.

As a first step, the Government took measures to rehabilitate the existing industries which had suffered considerably during the Second World War and made efforts to achieve full utilisation of the installed capacity in existing industries. After achieving this aim, Government placed special emphasis on the development of iron and steel, heavy engineering, heavy chemical, and other producers and capital goods industries as they were considered essential for the rapid promotion of the growth potential of the national economy.<sup>1</sup> Special emphasis has been placed on projects which by contributing to exports will earn or by replacing imports will save foreign exchange. At the same time development of those industries which provide essential commodities like paper, sugar, cloth, etc., has also been accorded due priority. Unlike the past, more attention has been given to intensive utilisation of plant facilities by running multiple shifts as the country is short of capital. Growing awareness of the government for industrialising the country is reflected in the increasing amounts that have been allotted in each successive plan for the programmes of industrial development.

We shall now briefly review the development of industries in private sector since we have already discussed the industrial progress made in the public sector in Chapter III. We shall also analyse the impact of industrialisation on our economy and give suggestions for the future pattern of industrialisation which would be more useful from the national point of view.

### Progress in Traditional Industries

Excepting textile industries considerable progress has been made in the other traditional industries, i.e., industries existing in pre-independent India during this period as would be clear from the following table.

Name of Industry	Unit	Production in				
		1950-51	1955-56	1960-61	1965-66	1968-69
Cotton Textile						
Yarn	Million kgs.	534	744	801	907	959
Cloth	Million metres	3401	4665	4649	4401	4297
Jute	000 tonnes	£37	1071	1097	1302	998
Sugar	Million tonnes	1.1	1.9	3	3.5	3.6
Cement	„ „	2.7	4.7	8	10.8	12.2
Iron and Steel (Ingots)	„ tonnes	1.5	1.7	3.4	6.5	6.5
Paper & Paper Boards	000 tonnes	116	190	350	558	660

SOURCE : *Economic Survey* 1969-70, Table 1.14.

1. Source: Programme of Industrial Development 1961-66, p. vi of Introduction.

### Cotton Textiles

This industry comprises 651 mills of which 290 are composite mills and 361 are spinning mills with a total installed capacity of 17.5 million spindles and 2.08 lakh looms.<sup>2</sup> There has been steady increase in the production of yarn but cloth production has stabilised around 5,000 million yards since the beginning of Second Plan as the Government policy has been to increase cloth production in the decentralized sector. The industry has been trying to switch over to the production of better quality fabrics. The problem of raw materials is also not so acute as it was at the time of partition because of considerable improvement in quantity and quality of indigenous cotton but the industry is still dependent on imported cotton for fine fabrics whose imports are now being channelised through Cotton Corporation. The industry is also in a position to meet a substantial portion of its requirements of textile machinery for modernisation and expansion. The industry has not fared well on export front<sup>3</sup> partly because of the policy of other countries to restrict the imports of cotton textiles and partly because of the lack of efficiency in the industry to restrict the imports of cotton textiles. Export of cotton textiles to the U.K., the U.S.A., etc., have been regulated under voluntary quota agreement. Besides there has been incursion of Japan, China and other countries into foreign markets which have been fed by cheaper and better quality fabrics from these countries. The industry, however, has the opportunity of stepping up of its exports to Russia and other East European countries under bilateral trade agreements if it is able to reduce its costs and effect improvement in quality<sup>4</sup> by modernising its equipment.<sup>5</sup> Despite the fact that industry has been established since long, it has not been able to keep itself abreast of the latest developments abroad and its productivity does not compare favourably with that of other countries. The industry is plagued with a large number of sick units and the cost of modernisation during the Fourth Plan has been estimated at Rs. 180 crores.

### Jute Industry

Despite the progress of jute industry in Pakistan, India holds its dominant position in the world by having about 58 per cent looms of the

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2. Report of the Ministry of Foreign Trade 1969-70, p. 79.

3. U.N. A Decade of Industrialisation in Asia and Far East gives exhaustive discussion of the fall in cotton textile exports.

4. Up till now the country used to export greys but now there is declining demand of this variety in foreign countries, and demand for mulls, printed fabrics and tapestry is increasing at a fast rate.

5. Only a little more than 16% looms are automatic while in advanced countries more than 3/4ths of the looms are automatic. Similarly there are meagre facilities for finishing, mercerising and shrinking fabrics.

world in 1964 as against 56 per cent in 1952. The dependence of the industry on imported raw jute has been considerably reduced by the increased production of home grown supplies. The country can be self-sufficient in raw jute provided a correct price policy is followed and efforts are made to improve the quality of raw jute. The production of jute goods has fluctuated around 1 million tons but since the beginning of Third Plan, there was steady increase in production because of increased demand both inside the country and outside. The entry of Russia and East European countries and rapid expansion of tufted carpet industry abroad specially in the U.S.A. has resulted in increased exports which amounted to more than a million tons in 1964<sup>6</sup> valued at Rs. 161 crores. In 1965 the value of exports went up to Rs. 184 crores.<sup>7</sup> Since then decline has set in. Another feature has been that the ownership and management of most of the mills has come into hands of Indian nationals.

The industry has been suffering from excess capacity and despite this fact there has been an increase in productive capacity within the last 15 years resulting in the misuse of capital which is so much in short supply. The excess capacity should be gradually scrapped and the industry should work on two-shift basis.

The future of the industry depends on satisfactory raw jute supply position, the extent to which it can diversify the pattern of production<sup>8</sup> and modernise its machinery to effect reduction in the costs.

It is, however, heartening to note that the industry has taken appropriate steps for the modernisation of machinery. Modernisation up to spinning stage has largely been completed.<sup>9</sup> More and more broad looms are being established to meet the demand for carpet backing cloth. But even then the technological progress of the industry does not compare favourably with the jute industries of countries like France, Belgium and Holland, where the new machinery installed is able to produce larger variety of goods in comparison to our industry.<sup>10</sup> A Jute Textile Consultative Council has been set up in 1969 to advise the government on all important matters concerning jute industry.

#### Sugar Industry

The industry has made rapid strides and has to its credit the unique distinction of having exceeded the plan targets in all the three Five-Year Plans. In 1969-70, the industry established a new peak by producing about 4.5 million tonnes of sugar showing a four-fold rise during the plan period.

6. *Commerce*, dated 17th April, 1965.

7. Report of the Ministry of Commerce for 1965-66.

8. Report of the Jute Enquiry Commission (1954), p. 106.

9. *India 1965*, p. 295.

10. Sharma and Chauhan: *op. cit.*, p. 500, II Edition.

At present the country is not only self-sufficient but also in a position to export substantial quantity because of the heavy stocks with the industry. India has joined the International Sugar Agreement from 1969 and has been assigned quota. Exports in 1969-70 amounted to 3.7 lakh tonnes and had to be subsidised as our prices are not in parity with the international prices.

A new feature has been the establishment of cooperative factories which account for a third of the total production. Their share will further increase as out of 39 factories licensed in 1969 and 1970, 34 are in cooperative sector. There has also been strong demand in U.P. to nationalise the sugar industry as most of the units are inefficient and have failed to pay the dues of the farmers in time and work for the benefit of the cultivators. U.P. Government has also accepted it in principle.

The target for sugar production for the Fourth Plan has been fixed at 47 lakh tonnes and almost the entire additional capacity has been licensed.<sup>11</sup> Nearly 4/5ths of the additional production will come from the new units and balance from the expansion of the existing units.

There has been considerable change in the regional distribution of factories. The share of Maharashtra, Andhra Pradesh, Tamil Nadu and Mysore in total production has considerably gone up because of the higher average yield and longer duration of the crushing season in these areas.

### **Cement Industry**

The production of cement has been more than quadrupled during the period but has not been adequate to meet the increased demand of the consumers. The production has lagged behind the target in each plan. The manufacture of cement has now become very widespread and there has been more than proportionate growth in Mysore, Rajasthan, U.P. and Orissa. The A.C.C. and Dalmia groups which produced nearly 4/5ths of the total cement in 1949 now account for 3/5ths of the total production.

To meet the increased demand for cement, private sector has been allowed an increase in the prices on the assurance that such profits would be ploughed back in the industry for further expansion. The Government is also establishing more factories to meet the increasing demand for cement.

### **Paper Industry**

The output in the paper industry has increased steadily during the Plan period to meet the impact of Government programme to raise incomes and literacy standards.<sup>12</sup> Price of paper had been controlled by the Government but the profits have been steadily rising and remained

11. Report of the Ministry of Food and Agriculture for 1969-70.

12. Rosen: *Industrial Change in India*, p. 21, Asia Publishing House, 1961.

above the general industrial average. Most of the units in the industry have expanded their capacities for lowering the cost of production. Recently, the price control has been abolished and since decontrol in 1968, prices have been increased twice at Rs. 250 and Rs. 200 per tonne. The industry has expanded to new areas, but the progress in the implementation of licensed capacity was slow and capacity created by the end of the Third Plan was 6.6 lakh tons against the target of 8.2 lakh tonnes. The production has been of the order of 5.2 lakh tons against the target of 7 lakh tons. Fourth Plan target is 8.5 lakh tonnes.

To increase the production, Government has taken up a 'crash programme' and Government is also setting up more units to supplement production. Uncertainty regarding the availability of cellulosic raw materials and the inability of the industry to attract new capital have retarded progress. As the supplies of bamboo pulp are not adequate, the industry will have to rely more on sugarcane bagasse in the future. The admixture of bagasse pulp with bamboo pulp has given satisfactory results in some South Indian Mills. The supplies of coniferous and other woods may also increase with the planned extension of roads in the Himalayan region.

### **Iron and Steel Industry**

Nationalist opinion in the country has always clamoured for the rapid growth of this industry which had also received favourable treatment at the hands of the colonial government in the country. But it was clear that private enterprise could not develop this basic industry to the desired extent and therefore Government decided to take initiative for the development of new units. But at the same time all possible facilities have been provided to Tata Iron and Steel Company and Indian Iron and Steel Company for their expansion. In the First Plan period the Government itself provided financial help in addition to guaranteeing the loans of World Bank to these companies for raising their capacity to 2 million and 1 million tons respectively. Besides, Government planned 3 integrated steel works with Russian, German and British collaboration at Bhilai, Rourkela and Durgapur. Their capacities have been expanded to 2.5 million, 1.7 million and 1.8 million tons respectively. A new factory is being established at Bokaro with Russian collaboration to produce 4 million tonnes of steel.

The ambitious Fourth Plan target of steel production has been fixed at 10.8 million tons of steel. Extension of Bhilai Steel Plant alone has been taken up and will contribute 4.2 million tons extra production. The Government is considering to set up three plants at Baldila, Hospet and Salem.

### **Development of New Industries**

In this section we shall discuss industries which did not either exist

in pre-independent period or their development was so meagre that their foundation may be said to have been properly laid during the post-independent period. We shall group them into 3 main categories:—

- (i) Engineering Industries.
- (ii) Chemical Industries.
- (iii) Miscellaneous Industries.

### Engineering Industries

The development of engineering industries was in its infancy before the Second World War. The stoppage of supplies created enormous demand, but the production could not make much headway on account of various difficulties. Most of the units in engineering industries were engaged in the fabrication of medium and light steel structurals and for the rest we were almost entirely dependent upon imported supplies. It was only during the Plan period that the development of engineering industries was taken up in the right earnest. Both the public and private sectors have collaborated in increasing the manufacturing capacity. The progress of engineering industries can be judged from the fact that the index numbers (base: 1956=100) of electrical and non-electrical machinery have jumped from 43.6 and 45.2 to 273.4 and 400 respectively in 1965-66.

At the beginning of the First Plan the total output of capital goods and industrial machinery amounted to Rs. 3-4 crores and we were virtually dependent on imported capital goods for all our major industries. But now the total output of textile machinery alone amounts to Rs. 25 crores per annum and we are able to meet a major part of the total requirements except in case of items like combers, fully automatic winding and reeling machines, high speed sizing machines, shrinkage control equipment, automatic looms. In respect of sugar mill machinery, there are 5 firms manufacturing complete sugar mill plants and 18 firms manufacture sugar mill machine items, thus obviating the needs of imports almost completely. The production in terms of value amounted to Rs. 8.33 crores in 1965; and for jute mill machinery, we are not only in a position to meet our requirements but are also in a position to export some items of jute machinery. Machinery making units of cement industry are now in a position to fabricate annually 15 complete cement plants of 600-1,000 tons per day capacity. In the sphere of chemical machinery the industry is capable of supplying complete plant for sulphuric acid, superphosphate, water treatment, solvent extraction, alcohols, etc. Besides, the manufacturing units can supply items like distillation stills, crystallisers, evaporators, heat exchangers, etc., with high indigenous content. In addition to industrial machinery, the production of some items of agricultural machinery like diesel engines and power driven pumps has made spectacular progress. Their production in 1968-69 amounted to 1,21,500 and 3,07,000 as against 5,500



and 35,000 at the beginning of the First Plan.<sup>13</sup>

Our progress has also been remarkable in the field of consumer durables like bicycles, sewing machines, radios and electric fans. In addition to meeting our requirements, we have begun to export them, and our exports of these items are gradually increasing. The production of bicycles, sewing machines and electric fans has increased by 20, 14 and 8 times respectively and the present production of bicycles and sewing machines amounted to 19.6 lakhs and 4.3 lakhs respectively in 1968-69.

### **Electric Machinery and Equipment Manufacturing Industries**

With the rapid increase in the generation of electricity, electrical machinery industries have got a tremendous fillip. The private sector units are mainly engaged in producing transformers (33 KV and below), motors, switch and control gears, electric cells, house service meters, dry and storage batteries, etc. The production of transformers of 33 KV. and below reached 4.8 million KVA in 1968-69 showing an increase of more than 25 times during the plan period. The quality is satisfactory and self-sufficiency has been attained in several types of transformers. The production of electric motors has increased by about 20 times but production has fallen much short of the demand and the target of 2.5 million H.P. fixed for the Third Plan was not achieved up to 1968-69. There has been considerable diversification in the range of production; we have become self-sufficient in several items like house service meters, lamps, batteries, various types of cables, etc.

In the field of transport equipment the private sector has been able to produce 35,600 commercial vehicles, 44,000 passenger cars by 1968-69. The automobile ancillary industry has also made rapid strides and the production amounted to Rs. 40 crores. However, adequate capacity for control cables, door locks, shock absorbers, tie rods, carburettors, etc., is yet to be established. Wagon building in term of 4 wheelers had increased by 12 times by 1965-66 but has declined steeply thereafter due to reduced railway demand. Besides, track fittings and metal sleepers are also being manufactured. Messrs. Jessop and Company Limited are producing metre gauge coaches as well as electric multiple unit lock; the total output is about 300-350 units per annum.<sup>14</sup> We have now begun exporting railway equipment to Africa, Burma and Hungary,<sup>15</sup> etc.

### **Machine Tools**

As is well known the capital equipment required for industrialisation

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13. Data have been taken from the Economic Survey (1969-70).

14. Motivation towards self-sufficiency—Article of P.S. Doraiswamy in Indian Railways Annual 1966.

15. Article of Kripal Singh: Railway Planning. A Review.

is very much dependent upon the products of machine tool industry which has been given all encouragement by the Government to step up its output. As a result the output which was merely of the order of Rs. 2.86 million in 1950 has jumped to Rs. 250 million, but the demand has, of late, slackened due to recession. About half of the output comes from the state-owned Hindustan Machine Tools and other factories. There has been a steady increase in the output and pattern of manufacture in terms of sizes and types of tools manufactured in the country.<sup>16</sup> Some of the important items produced are: various types of lathes, drills, milling machines, grinding machines, electrical and pneumatic tools, shaping machinery, etc. In spite of the very commendable progress, the consumption of machine tools has outstripped the demand and about half of the country's requirements are being met by imports. During the last decade there has been almost tenfold increase in the production of ball and roller bearings which are important components in various important industries. Several new firms have made their debut in this branch which was the monopoly of National Engineering Industries, Jaipur, up till Second Plan period. The range of production has also been diversified.

The products of engineering industries are mainly meant for home consumption and meet only a part of our requirements. The imports of capital goods, iron and steel, and non-ferrous metals, electrical machinery, machine tools, transport equipment, etc., exceed Rs. 700 crores in 1968-69.<sup>17</sup> Our exports of engineering industries have increased and reached Rs. 142 crores in 1969-70 as compared to the exports of Rs. 16 crores in 1961-62 because of intense efforts made to utilise idle capacity caused by fall in home demand.<sup>18</sup>

### Chemical Industries

Among the chemical group of industries, 4 important groups are: (i) sulphuric acid, (ii) caustic soda, (iii) soda ash, and (iv) fertilisers. A major portion of the fertiliser production is concentrated in public sector units about which we have already discussed.

The production of sulphuric acid has always enjoyed natural protection because of the heavy freight charges involved and has been carried out near consuming markets. The production has increased nearly 10 times since 1948 but is only half of the Third Plan target. The growth in production reflects the growth of industries like fertilisers, rayon, petroleum refining, steel, etc., which are the main consumers. The only sore point is that we do not have sulphur deposits in the country and meet our requirements from the U.S.A. and Canada. Efforts are being made to use

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16. Report of the Ministry of Industry for 1965-66.

17. Economic Survey, 1970-71.

18. Reserve Bank Bulletin, October, 1970.

Amjhore (Bihar) pyrites for the production of sulphuric acid.

The production of soda ash has increased by more than 10 times between 1948 and 1965-66 and the country is now self-sufficient. Equally remarkable has been the progress of caustic soda industry. In 1948, only 4,000 tons of caustic soda was produced within the industry and now we are in a position to manufacture 3,13,000 tons and imports have been almost eliminated. The production of both these chemicals requires salt, limestone and coal. There is hardly any site where all the three are available in the same neighbourhood. Therefore production has been confined to places like Mithapur, Porbander, etc., where salt—the principal raw material—is available. Most of the units are not of economic size.

The production of plastic monomers, vinyl chloride and styrene, butadiene, carbon black, rubber chemicals, citric acid, camphor, etc., has been taken up for the first time by private sector during the Third Plan period.

### Miscellaneous Industries

With the availability of cheap electric power, the production of aluminium has also become feasible and Government has given all encouragement to this industry in view of the fact that the country is deficient in other non-ferrous metals like copper. There are four important producers: viz., Hindustan Aluminium (Renukoot), Indian Aluminium (Alwee and Hirakud), Madras Aluminium (Mettur) and Aluminium Corporation of India (Asansol). The production in 1968-69 amounted to 1,25,000 tons against 4,000 tons in 1950-51; proposed public sector units in the industry have not yet started production.

Rayon yarn industry has made spectacular progress in the post-war years. The production of yarn which was merely two thousand tons reached a record level of about 1 lakh tonnes in 1968-69. Most of the units work with the imported pulp but recently some factories for making rayon grade pulp from bamboo have been established in south India. Difficulty of making rayon pulp from indigenous raw materials is standing in the way of further progress. A subsidiary of Imperial Chemical Industries has also commenced the production of polyester named 'terene', which has become very popular in the country and several new units are being set up. Man-made fibre industry has been one of the most profitable industries in the country since Independence, and shares of nylon and polyester fibre companies have become very popular with the investors.

Rubber goods industry has made remarkable progress and self-sufficiency has been attained in respect of practically all the important items. There are at present 83 organised units engaged in the manufacture of a wide range of goods such as automobile tyres and rubber components, bicycle tyres, mechanical and moulded rubber goods. Most of the raw mate-

rials, e.g., rubber, rayon and nylon cord, lead wire, carbon black, rubber chemicals are being produced in the country.

### **Development of Infra Industrial Structure**

For the adequate and healthy development of industrial structure in the country, it is essential that infra-structure be properly developed. In the absence of proper infra-structure industries cannot flourish to the desired extent. Both the Fiscal Commissions had clearly pinpointed the need of providing such facilities in addition to tariff protection. Private sector cannot of itself develop this infra-structure because of massive investment that is needed, and returns are inadequate in the beginning. All possible efforts have, therefore, been made by our Government to provide these requirements of development. Main attention has, however, been given in the direction of finance, transport and power development which we shall discuss here briefly.

### **Industrial Finance**

Adequate provision of long term finance is a *sine-qua-non* for industrial growth in the country. In the pre-independence India, there was paucity of such institutions which could render such assistance. The question of providing long term financial assistance immediately attracted the attention of our Government which passed an Act in 1948 for the setting up of Industrial Finance Corporation. Both the Government and private financial institutions collaborated in providing the capital, and the Government guaranteed a minimum return of  $2\frac{1}{4}$  per cent (later raised to 4 per cent) of the capital irrespective of the profit earned. The Corporation provides long term loans at reasonable rate of interest (in the beginning the interest was 5 per cent per annum but it has now been raised to 8.5 per cent per annum) to public limited companies and cooperative societies, which are payable in instalments spread over a period of time—generally 15 years. In addition, the Corporation has guaranteed deferred payments and engaged in underwriting of the shares and debentures. The magnitude of assistance rendered by the corporation can be judged from the fact that in 22 years of its existence it has sanctioned financial assistance to the tune of more than Rs. 337 crores in the form of loans, guarantees, deferred payments and underwriting of securities. About  $\frac{2}{3}$  of the assistance has been utilised in setting up of the new undertakings and the rest has been availed of by the existing undertakings for their modernisation and expansion. Another institution named Industrial Credit and Investments Corporation was set up in 1955 to encourage the participation of private capital both Indian and foreign for the industrial development of the country. A significant part of the capital is being held by foreign nationals and institutions, I.C.I.C.I. has been successful in borrowing very substantial

amounts in foreign currency from I.B.R.D. (World Bank), A.I.D. (Agency for International Development) and K.F.W. (Kreditanstalt für Wiederaufbau in Reconstruction Loan Corporation) of Germany, etc. At the time of inception, this was the only institution which engaged itself in underwriting of industrial securities and subscribing directly to the shares of the companies. Nearly three-fourths of the loans provided by the I.C.I.G.I. are in foreign currencies. Government owned National Industrial Development Corporation established in 1954 gave loans for the modernisation and rehabilitation of concerns in cotton textiles, jute and machine tools industries, which aggregated to Rs. 25 crores up to 1963. Since then the work has been taken up by Industrial Development Bank of India. At state level, State Finance Corporations have been set up in all states to cater to the long term financial requirements of small and medium sized industries in their respective states.

Even after the establishment of these institutions, it was felt that there is need of an apex institution which can coordinate and supplement the operations of other institutions providing long term finance to the industry.<sup>19</sup> With these aims in view the Industrial Development Bank of India had been established in 1964 under an Act of Parliament. In addition to supplementing the efforts of existing financial institutions, it provides direct assistance to industrial concerns by promoting loans, underwriting shares and debentures and furnishing guarantees for loans and deferred payments. It also provides credit to exporters. This institution is not merely a lending institution but is a part of Government fiscal policy to assist the industrial growth into desired directions. In the six years ending on 30th June 1970, the I.D.B.I. has sanctioned financial assistance to the tune of Rs. 347 crores to strategic sectors of industry such as cement, basic chemicals and fertilisers, etc. In pursuance to the recommendation of Dutt Committee assistance would be rendered to backward regions on concessional terms and technical guidance would be given to the emerging new class of entrepreneurs.<sup>20</sup> Life Insurance Corporation and Unit Trust of India also play an important part in channelising resources for investment in private sector. According to the estimates of Dutt Committee term finance sanctioned to private sector amounted to Rs. 808 crores between 1956 to 1966 in the form of loans (67.4 per cent), underwriting of securities (19.2 per cent), guarantee of deferred payments (9.7 per cent) and deficit subscription (3.7 per cent). A major portion of this assistance has benefited only a handful of big capitalists. Financial institutions have so far failed to build adequate expertise for scrutinising the proposals and

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19. Reserve Bank Bulletin, March 1966.

20. *Ibid.*, October, 1970,

rendering proper technical guidance. There is also need to make precise demarcation in the activities of various financial institutions.

### Transport

Transport system has also been equipped to meet the demand arising out of the increased tempo of industrial activity in the country. Railways are the principal means of transport in the country and there was heavy backlog of replacement since depression. Second World War and partition put the railway system to serious stresses and strains. The Government had, therefore, to pay immediate attention to the rehabilitation of railway rolling stock and track renewals for which considerable financial assistance was also received from the World Bank.<sup>21</sup> Soon thereafter the work of augmenting the capacity of railways for handling additional traffic was taken up. There has not been significant addition in the kilometrage. Total length of less than 6,000 kilometers of new lines has been laid during the plan period. New railway lines have mainly been laid in Chotanagpur plateau and its surrounding areas which was not properly opened by the development of railways in British regime for the effective utilisation of its resources. As a result, now steel plants have been established in this region and the export of iron ore to other countries has also become possible. This area is now pulsating with industrial activities.

The main emphasis has been laid on increasing the traffic capacity of the existing lines by doubling the track and electrification or dieselisation of those sections where traffic intensity is very high. The Assam route and the trunk routes connecting Delhi, Bombay, Calcutta and Madras which form only 14.4 per cent of the route kilometrage have the highest traffic.<sup>22</sup> In certain areas, meter gauge sections have been converted to broad gauge for handling increased traffic. Marshalling yards have been modernised with the installation of retarders at Mughalsarai, Andal, Bhilai and Bondamunda.<sup>23</sup> As a result of these measures, there has been an increase of 120 per cent in freight traffic in terms of originating tonnage during the plan period. Railways carried 204 million tons of freight traffic in 1968-69. Goods traffic handled by electric and diesel locomotives has increased to 45 per cent as against mere 2 per cent in 1955-56. For the first time in their recent history railways are now in a position to handle almost the entire goods traffic offered to them and by 1973-74 are expected to carry 280 million tonnes of goods.

Dependence on imported equipment and supplies has been virtually

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21. *Economic Times*, dated 1st July, 1966—World Bank and I.D.A. Loans to Railways amount to £575 million.

22. *18th Year of Freedom*, p. 317.

23. Railway Planning: A Review by Kripal Singh: *Indian Railways Annual 1966*.

eliminated. For gearing the railway to meet the requirements of growing industries, capital at charge has been increased to more than three times from Rs. 850.11 crores in 1951-52 to nearly Rs. 3,200 crores in 1970-71.

The progress in the road construction has, however, not been adequate. Kilometrage of metalled roads has been nearly doubled during the plan period as there has been four-fold increase in the number of vehicles on the roads. During the Fourth Plan more funds are being devoted for road development.

The question of modernising the ports for handling additional cargo also received the attention of the Government. As a result the cargo handling capacity of our ports has been more than doubled during the period under review. But the problem of congestion at ports has not yet been solved. A new port has been developed at Kandla. Haldia, Mangalore and Tuticorin are also being developed as major ports. By 1973-74, our ports will be able to handle traffic totalling 77 million tonnes against 55 million tonnes in 1968-69.

### Power Development

After transport, the supply of industrial fuel and power is another important factor which helps in the progress of industrialisation.<sup>24</sup> The State Governments have, therefore, allocated very substantial amounts for the development of electric power during the plan period. As a result the generating capacity jumped to 45 billion kwh. by 1968-69 as against 5.0 billion kwh. at the beginning of the First Plan. Main attention has been concentrated on the development of hydel power, whose average production cost has been estimated to be the lowest and does not involve any perennial expenditure. However, we have been able to use only small portion of the hydro potential. In March, 1969 the hydel generating capacity was a little less than 6 million kw. against the potential 40 million kw. at 60 per cent load factor. With the exception of Rajasthan and Assam all the other major states have made considerable headway in the generation of electric power. But the demand has always been ahead of the available supply and there is further need to step up the production of electric power by properly utilising the low grade coal of Central India and our water power resources. Since the hydel power is fluctuating with the amount of rains, there is necessity of inter-connecting power system of neighbouring states to even out fluctuations in the electric supply. Ultimately an All-India Grid should be established to reduce these fluctuations to the minimum. This policy has been accepted by the Government in principle and efforts are being made in this direction.<sup>25</sup> It may be inter-

24. *India 1965*, pp. 257-58.

25. *Annual Plan, 1966-67*, p. 47.

esting to note that India is the third biggest producer of electric power contributing 11.4 per cent of the total power in ECAFE region, while Japan and Australia account for 3/4ths of the total production in this area (63 and 12.7 per cent). Further, India has the highest rate of expansion since 1961,<sup>26</sup> the beginning of the Third Plan.

The production of coal has also more than doubled at 75 million tonnes but target of 97 million tons for Third Plan has not yet been achieved mainly because of the slackness in demand. New fields of mineral oil have been located in Assam and Gujarat and adequate refining capacity has been established in the country to meet a very substantial part of our requirements of petroleum products which are increasing at a very rapid pace.

### Foreign Trade

The foreign trade of our country during planning era reflects the impact of our development plans on the economic structure of the country and shows several variations as compared to the past period.

Both the volume and the value of our foreign trade have registered a rise but unlike the past, there has been a growing adverse balance<sup>27</sup> of trade which has been met partly by depleting the foreign exchange reserves and partly from external assistance. This growing trade gap was not due to any deterioration in the terms of trade as the unit value of exports between 1951-66 rose by 13 per cent as against 4 per cent in imports. Our exports were virtually stagnant in the first two plans and even in the Third Plan they registered a compound growth rate of 4.1 per cent per annum. On the other hand, there was continuous increase in imports. Our index of imports (base year 1953=100) moved to 275 by 1967 as against the movement of world index to 239.5. During this period, our exports failed to move up with the world exports. Indo-Pak hostilities and the unfavourable weather conditions during the last year of the Third Plan further accentuated the adverse balance and the Government was at last compelled to devalue the rupee in June 1966. The aim was to increase the competitiveness of our exports and discourage the imports. Following devaluation, import policy for 59 priority industries in respect of raw materials, components and spare parts was liberalised. At the same time, imports of a number of items were banned following increase in their domestic production. Incentive schemes were abolished and export duties on a number of items were also increased to safeguard foreign exchange earnings. In the two years following devaluation, exports dec-

26. *A Decade of Industrialisation in the Far East*, pp. 2-4.

27. Figure up to 1960-61 have been taken from Report on Currency and Finance for 1961-62 while figures for 1965-66 and onward have been taken from Reserve Bank Bulletin, October, 1970.



lined on account of drought conditions, depressed world and dislocations caused by the devaluation and there was only marginal reduction in imports because of the need to import foodgrains to counteract the food shortage in the country. Since 1968-69, there has been considerable improvement. Our exports have been rising and imports have considerably declined because of the steep fall in the imports of foodgrains, metals, machinery, transport equipment and mineral oil. Higher rupee cost of imports and the restrictive policy of the Government have also contributed to decline in imports.

In 1948-49 about a third of the imports consisted of manufactured articles but as a result of industrialisation and imposition of controls, the country has become more or less self-sufficient in respect of consumer goods and in 1969-70 only 2 per cent of our imports consisted of consumer goods.<sup>28</sup> But on the other hand, our requirements of raw materials, spares and components are growing. In 1948-49, 31 per cent of the imports consisted of raw materials and produce mainly unmanufactured; as against this raw materials, components, etc., constituted 62 per cent of our imports in 1969-70. Even this figure does not reflect fully the requirements of our industries as imports had to be seriously curtailed because of the difficulty of foreign exchange and several industries had to work below capacity. This is despite the fact that our dependence on imports in respect of raw jute and cotton has become considerably less during this period. The import of capital goods constituted nearly 1/5th (18 per cent) of our total imports in 1964-65 but in 1948-49 it accounted for only 12 per cent of the total imports.

The imports of complete machinery have been replaced by the imports of components, spare parts and metals. With the establishment of adequate refining capacity instead of importing finished petroleum products crude oil is being imported. The country has become virtually self-sufficient in respect of soda ash, caustic soda, various types of machinery (sugar mill machinery, jute mill machinery, cement machinery), consumer durables, paper. On the other hand imports of machinery, iron and steel, non-ferrous metals, machine parts, petroleum products, intermediate products have substantially grown. Our continued dependence on foodgrain imports has been a bleak feature of our planning strategy and imports reached an all time high of Rs. 651 crores in 1966-67 accounting for about 30 per cent of the total imports in that year. Increased imports of fertilisers and pesticides are, however, welcome in the transitional period as they would help us in increasing our agricultural production and reducing

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28. Figures for 1948-49 have been taken from the Review of the Economic Conditions of India with special reference to Foreign Trade in 1948-49, p. 180, while figures for 1969-70 have been taken from the *Eastern Economist*, Annual Number 1971.

dependence on food imports. Of late imports of foodgrains have declined steeply because of green revolution. Another disturbing feature is that our country has turned importer of vegetable oils while in the pre-independence period, we were one of the leading exporters.

A scrutiny of the imports gives us an idea of the type of industrialisation that has taken place in the country. Most of our industries are dependent on imported supplies not only in respect of capital goods but also for raw materials, while in the pre-Independence period, most of the industries developed were utilising the local raw materials (e.g., iron and steel, cement, sugar, cotton, and jute). The recent phenomenon is probably due to the fact that efforts have only been made in respect of import substitutes because it is easier to develop import substitute industries in comparison to export industries. Our manufacturers have been able to sell their products very easily under the protective umbrella provided by the Government. The profitability of engineering industries is much higher than the profitability of export industries unlike jute and tea.

Despite the strategic role of imported supplies to key commodities in the economic growth, there is sufficient evidence to suggest that supplies of foreign exchange have not been as efficiently utilised as possible.<sup>29</sup>

During the first few years of planning, there was what may be called a 'Capital goods fallacy' in our policies—an idea that the import of capital goods should be facilitated. It was not realised that there could be excessive or wasteful imports of capital goods.<sup>30</sup> Foreign exchange was allowed even in respect of industries producing articles of luxury or semi-luxury, e.g., air conditioners, water coolers, refrigerators, etc. Apart from scrutinizing the foreign exchange needs in respect of current inputs, there is need for properly scrutinizing items of capital goods and machinery.<sup>31</sup> High priority need to be accorded to those industries with a good prospect, of rising external demand and growth industries so as to derive maximum benefit from foreign exchange imports.

In spite of growing industrialization the exports have not kept pace with the growing volume of imports. In the beginning of the plan period our exports financed 83 per cent of our imports but in 1964-65 only 58 per cent of the imports were financed by exports.<sup>32</sup> During the first two plan periods there was insignificant increase in our exports. As a result of active steps taken by the Government, there has been 4.1 per cent compound

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29. *World Economic Survey 1964*, Vol. I, p. 116.

30. B. Datta: *Essays in Plan Economics—Planning for Export*, p. 121, 1963, World Press.

31. 'Import Substitute', an Article by R.L. Varshney: *Economic Times*, 10th May, 1966.

32. An Article by Braj Kishore: *Commerce Annual 1965*.

annual growth during the Third Plan. However, our share in the world trade has declined from 2.1 per cent in 1951 to less than 1 per cent in 1969. Even non-Communist developing countries have shown much better performance on export front and there has been 4.2 per cent annual increase during the period of 1951-63.<sup>33</sup>

There has not been any significant change in the pattern of our export trade. We have not been able to diversify the pattern of trade to any great extent and identify some items whose exports may increase at a fast rate. Jute, tea, tobacco, cotton yarn and manufactures, etc., which have been our traditional exports still account for the bulk of foreign exchange earnings. Among the new items to appear on the scene are ground-nuts, oil cakes, iron ore, cashewnuts, marine products, handicrafts, gems and jewellery, coffee, iron and steel, footwears, chemicals products and sugar. The exports of oilcakes, coffee, cashewnuts and iron ore have jumped from Rs. 10.5 crores in 1950-51 to Rs. 216.8 crores in 1968-69 showing an increase of 21 times. Of late, exports of oil cakes, leather manufactures, engineering goods, chemicals, fish and fish products, handicrafts and gems and jewellery are picking up fast and they are expected to grow further.

Another feature worthy of note is that our newly started industries and other industries started during the post-protection period have not been able to contribute to any significant extent to our exports. Some of them are being exported only with cash subsidy granted by the Government and their exports may diminish with the rising tempo of home demand. A sum of Rs. 56 crores has been provided in 1971-72 budget for export subsidy.

After a careful study of the foreign trade there is an inescapable conclusion that our industrialisation has proceeded in the main direction of import substitution. Home made goods have replaced imported goods. This is in continuation of the trend started after Swadeshi Movement. We have not yet been able to change the trend during the plan period. The efficiency of our industries does not compare favourably with those of other countries and therefore we are unable to offer our products at competitive prices in international markets. The production of cotton and jute industries which are more than 100 years old has also shown declining trend. The real test of industrialisation in the country is that it should be able to offer manufactured goods from imported raw materials at competitive prices as is being done by Japan and Germany. The mere fact that imports are being replaced is not a sufficient justification for the development of industry.<sup>34</sup>

There was a growing realisation of the need for expanding exports

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33. *Economic Times*, May 1966.

34. B. Dutt: *A Note on Export Policy*, p. 109.

during the Third Plan. Government of India appointed the Mudaliar Committee to suggest measures for expanding the exports. The Mudaliar Committee reported in 1962 and came to the conclusion that no really effective export expansion measure has been adopted till now.<sup>35</sup> Government owned State Trading Corporation, Minerals and Metals Corporation are making efforts to promote the exports of Indian goods. The State Trading Corporation is trying to explore new markets for our traditional goods. Export of unconventional items like shoes, handicrafts, electric fans, fruit juice, sports goods has also been promoted.<sup>36</sup> Export Credit and Guarantee Corporation and Industrial Development Bank of India have been set up for rendering financial assistance in promoting exports of the country. Institute of Foreign Trade conducts research for promoting exports. 19 Export Promotion Councils, 6 Commodity Boards and the Federation of Indian Export Organisations have been set up for promoting exports.

The Government of India has concluded bilateral trade agreements with Russia and other East European countries. Our trade with these countries has risen by leaps and bounds during the plan period and is full of future potentials. There is a growing complementarity in as much as these countries are able to supply vital raw materials, mineral oil, machinery and are prepared to accept in exchange items like jute goods, coffee, tobacco, textile fabrics, fruit juices and other consumer goods which we can easily export. Thus the trade with these countries satisfies what Shonefield calls the 'principle of mutual convenience'.<sup>37</sup> Tripartite agreement between India, U.A.R. and Yugoslavia has been concluded to promote trade and industrial cooperation. These countries are setting up special manufacturing units for meeting the requirements of each other.<sup>38</sup> We can also increase the exports of our manufactures to the countries of the Middle East and Africa<sup>39</sup> by entering into suitable barter deals with them.

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35. P. 24 of the Report.

36. State Trading Corporation—Article of B.P. Patel in *Economic Times*, dated 18th May, 1966.

37. Speech of Shonefield—*vide* the Proceedings of Poona Seminar on Paths to Economic Growth held in January, 1961, edited by Amlan Dutta.

38. Report of the Ministry of Foreign Trade, 1969-70.

39. *Commerce*, dated 13th November, 1965. In the article 'Exports to African Countries', Shri P.M. Shah narrates his experience of the feelings of African businessmen. They feel that we are not keen on developing our export trade because of huge sheltered internal market. Indian businessmen do not care for good packing, for quality goods, for correct documentation, for preshipment inspection, etc. They have considerably to improve their image regarding their integrity if they want to have more business.

However, the efforts made so far have not succeeded to the desired extent. With the result that the country had to resort to devaluation to boost up its exports and to curtail the unnecessary imports. There is now a realisation that our export planning and planning for development should be properly integrated with a view to generating export surpluses.<sup>40</sup> The entire industrial economy will have to be export oriented<sup>41</sup> to achieve higher export targets fixed in the Fourth Plan. We can considerably augment our foreign exchange by properly developing exports of animal husbandry products, marine products, fruits, etc. Close attention will have to be given to policies which will bring about reduction in cost of production of our industries so as to make them competitive in international markets. Adequate steps should be taken to dovetail the import-export targets into the plans and projections of development to lay the foundation of a big trade. A 'Crash Programme' was launched in 1969 and Government has framed its strategy in Export Policy Resolution presented to Parliament in July 1970. A series of measures including concessional finance for export assistance, and incentives, transport facilities, training, market research and nationalisation of institutional arrangements have been taken up. Technical assistance from the United Nations and other friendly countries has been obtained to help us in stepping our exports.

### Impact of Industrialisation

As a result of the active assistance and favourable policies adopted by the Government, the progress of industrialisation has been fairly rapid till 1965. Despite stresses and strains each year has been a stepping stone for greater progress in the coming year. There was no depression in industrial activity because of the inflationary policy followed by the Government. Roughly the industrial production has increased two and a half times during the plan period, showing expansion in almost all industries. The index numbers of industrial production which stood at 73.5 in 1951 (base: 1956=100) has jumped to 191.1 in February 1966. But the rate of progress has been much below the expectation of the planners. In the Third Plan period, the Government had visualised an annual increase of 11.1 per cent; as against this average rate of increase has been only 7.9 per cent. Probably more disturbing is the fact that the rate of increase declined considerably since 1965. As against an increase of 9.2 per cent in 1963-64, the rate of increase has come down to 43 per cent in 1965-66.<sup>42</sup> Indo-

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40. Foreword of Manubhai Shah in the book, *New Directions in India's Trade Policy*, by P.C. Salvi.

41. *Ibid.*, p. 70.

42. *Fourth Plan*, p. 7.

Pak hostilities, reduction in foreign aid, the succession of bad harvests and the slowing down in public investment led to set-back in production. There was virtually no growth in 1966-68. Since then there has been industrial recovery and the growth in production has been of the order of more than 6 per cent between 1968-70 against the growth rate of 9 per cent visualised in the Fourth Plan. Our country which accounted for 15.3 per cent of the total output in ECAFE region in 1958 contributed only 12.6 per cent of the total output in 1961.<sup>43</sup> It is thus obvious that relative industrial growth has been less than that of other countries in the region.

During the period under review more attention has been paid to the development of key and basic industries for laying the sound foundation of industrial progress. The Government itself has set up giant units in steel, engineering, heavy chemicals, including fertilisers and petroleum industries. As it was learnt by experience of pre-independence period that these industries would not achieve desired progress without active state participation. Private sector did not have the necessary funds to invest in such industries which required heavy initial investment and did not provide attractive return in the beginning. Private sector has also made considerable investment in the engineering and chemical industries in addition to the consumer goods industries. As a result the pattern of industries has changed considerably.<sup>44</sup> Cotton textiles, jute textiles and sugar industry occupied dominant positions at the beginning of the plan period.<sup>45</sup> But now basic and capital goods industries like iron and steel, electric power, industrial chemical have moved up to occupy top position. Newly started industries are highly capital intensive and therefore capital employed in the industries is a better indicator of their relative importance in the industrial economy of the country. Net output ratio between consumer goods industries and capital goods industries in 1965 was 1.2 as against 4.1 in 1947. Out of Rs. 4,646 crores of total industrial capital during the first three plans, Rs. 3,002 crores were invested in metallurgical, engineering and chemical industries.<sup>46</sup>

Thus, there has been considerable diversification in the industrial pat-

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43. *A Decade of Industrialisation in the Far East.*

44. Industrial Pattern of India—Article contributed by Tulsi Ram Sharma in *Commerce*, dated 26th March, 1966.

45. According to 1950 Census of Manufacturers (p. 9), the most important industries (from the point of view of productive capital employed) in order of importance were cotton textiles, jute textiles, sugar and iron and steel industries. The chemical, general engineering and electrical industries were almost in their infancy. The cotton textile industry employed more capital than the capital employed in jute, sugar and iron-steel industries together.

46. *Eastern Economist*, Annual Number 1971, p. 1139.

tern and the development in several industries has become quite significant. As a result of this growth, the country has become self-sufficient in several lines of consumer goods whose imports have now become quite insignificant. Production in industries manufacturing consumer durables, like bicycles, electric fans, radio receivers, office equipment, rubber goods, etc., has reached a stage where not only self-sufficiency has been attained but exports also have become possible. Imports of chemicals like caustic soda, soda ash, drugs, iron and steel, aluminium, transport equipment, electric transformers, etc., have also become considerably less. Progress has been also rapid in the expansion of capacity in petroleum refining, fertilisers, heavy machinery, machine tools, agricultural machinery and petro-chemical industries.

However, the demand is running ahead of the supply in several industries and that accounts for the growing volume of imports. In a couple of years, the production of several giant units will reach the full capacity and we shall then be able to reduce our dependence on imported supplies considerably. Most of the new industries are producing for the home markets because of very substantial rise in the demand and have not yet had enough of production to cater to the requirements of foreign markets. Further, sufficient efforts have not yet been made in effecting reduction in the cost of production because the supplies can easily and profitably be disposed of at the current level of prices.

Examining the industrial development from the regional point of view, we find that industrial development is no longer confined to port towns of Bombay, Calcutta and Madras. New centres are fast coming up with the setting up of new steel works at Rourkela, Durgapur and Bhilai and the whole of the plateau of Chotanagpur has come to life and bristling with activity. A large number of ancillary and subsidiary industries have also been set up in this region. It is conceivable that this area may become the Rhur of India in the near future. The development of electric power has also given birth to new centres like Renukut, Kota, Bangalore and Mysore. It appears that industrialisation is spreading to new areas. But the tendency for new enterprises to gravitate towards the already overcrowded metropolitan areas has not changed and not enough has been done to restrain this process. Maharashtra and Gujarat comprising the old Bombay province and West Bengal occupy the first and second positions respectively. Madhya Pradesh in place of Bihar has come to occupy the third position. Bihar now occupies fourth position. Andhra and Tamil Nadu comprising the former Madras province have taken lead over U.P. Mysore state has also been benefited by the development of hydel power and occupies an important position. The case of Punjab and Delhi is slightly different, though they do not occupy important position in the analysis of

organised industries but contain a mass of medium and small scale industries which are quite prosperous.

Despite the substantial progress of industries, the organised sector occupies small place in the national economy. Large scale industries have not been able to absorb a substantial proportion of the population. In 1960-61, factory and mining establishments employed only 2.8 per cent of the total population.<sup>47</sup> Thus, there has not been much change in the occupational pattern of the population. Pressure on land remains more or less the same.<sup>48</sup> This phenomenon is due to the fact that most of the industries started during the plan period are highly capital intensive and have not generated sufficient employment potential. Between 1951 and 1964 the production has increased by 133.6 per cent while employment index has shown a rise of only 38.6 per cent. Assuming a rate of 2.2 per cent growth in population, we can safely conclude that there has only been marginal change in the percentage of population employed in large scale industries.<sup>49</sup> Employment in private organised sector increased from 56 lakhs in 1964 to 68 lakhs in 1966, and since then there has been no expansion in employment opportunities till March 1969.

From the point of view of contribution to national income, the factory and mining establishments have not also shown very significant improvement. In 1948-49, they contributed about 7 per cent to the total output while in 1964-65 their contribution has gone up to a little over 11 per cent at current level of prices.<sup>50</sup> Similarly there has been only marginal increase in the contribution of corporate sector to the total national savings. The percentage contribution in savings was 6.45 per cent in 1950-51 which has gone up to 7.1 in 1962-63. It is thus obvious that the country has to travel a long way before it can attain the status of an industrialised country.

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47. Notes on Perspective of Development in India: 1960-61 to 1975-76.

48. Total percentage of the population dependent on agriculture is more or less the same but percentage of economically active population dependent on agriculture increased from 72.1 per cent in 1951 to 73.8 per cent in 1961. Fact books on man-power, Institute of Applied Man-power Research, New Delhi.

49. Productivity in Manufacturing Industries, Eastern Economist Annual Number, 1966.

50. Data taken from Reserve Bank Bulletin, December, 1965.



## CHAPTER XI

### THE DECENTRALISED SECTOR AND ITS PLACE IN THE NATIONAL ECONOMY

Small-scale and cottage industries occupy an important position and form an integral part of the economy of a country. Even in industrially advanced countries of the West like U.S.A., U.K. and Germany, small industries are in a flourishing condition and exist side by side with the large-scale industries. Majority of the industrial units in these countries are working on small scale and are widely dispersed. The industrially advanced nation of the East, i.e., Japan is said to be the citadel of cottage and small scale industries<sup>1</sup> which are so well organised that they have been able to undersell the products of large scale industries coming from the West. Japanese achievement in the industrial sphere through its small scale industries has provided a new hope for the developing countries and has been worthy of emulation.

In a country like ours, where unemployment and underemployment are widely prevalent, the cottage and small scale industries which can be worked with small capital and lower level of skill assume special importance. Many thinkers feel that the salvation of the Indian economy can come only through rapid progress in the field of decentralised industries.

It is well known that industrialisation on Western pattern for more than a century has not been able to absorb the growing volume of population to any significant extent, and as a result the pressure on agriculture has continued to increase. The position has become so precarious that the majority of cultivators do not have sufficient land whereby they can make both ends meet. They are deficit cultivators and are not in a position to save anything for effecting improvement in agriculture and have created a vicious circle of poverty and low productivity. The growth of these industries can provide the much needed relief by withdrawing excess population from the agriculture and leading to greater production in both agricul-

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1. In 1966, there were 6,67,994 industrial units in Japan and 99.4 per cent of all the manufacturing units were in the small scale sector. This sector accounted for 70.1 per cent of industrial employment, 50.8 per cent of industrial output, and 44.4 per cent of the value of exports of industrial products—*vide* Report of the Indian Government Delegation to Japan to study small scale industries (1969).

ture and indutry. Moreover, by developing industries in rural and semi-urban areas, we shall be able to avoid all the evils resulting from the concentration of large scale industries in the metropolitan cities. Apart from the loss of time caused by traffic congestion, damage to public health and loss of efficiency caused by over-crowding, smoke and noise, the strategic consideration also favour the growth of industries in the decentralised sector.<sup>2</sup> The lower social costs of providing employment in semi-urban and rural areas near their residence also favour the growth of industries in the decentralised sector.

It is contended by some economists that the development of the economy should be measured only in terms of aggregate national product and employment considerations should not weigh with the Government. However, a Government wedded to the socialist pattern of society and aiming to be a welfare state cannot ignore this vital question.<sup>3</sup> Even in advanced countries of the West, the question of providing full employment has become of paramount importance since the depression. No country in the world today can progress by keeping a substantial part of its people unemployed or under-employed and therefore will have to devise ways and means of mobilising the vast manpower in productive channels suited to their genius.

The question of developing small-scale industries is also important in a country like India which has got limited capital resources in relation to its vast manpower.<sup>4</sup> Labour intensive technology can help in achieving more output with the available amount of capital.<sup>5</sup> Further, a large part of total investment can be used for the production processes in small plants than in large industry which requires additional capital intensive overhead expenditure.<sup>6</sup> Moreover, the decentralised sector can help in mobilising

2. A very nice discussion about the decentralisation of industries is given by Dr. T.R. Sharma, in Chapter XIII, p. 237, of his book, *Location of Industries in India*.

3. 'Indian Economic Journal, January 1956'. 'The Case of Village and Small Scale Industries', article of M.L. Dantwala.

4. R.V. Rao: *Cottage Industries in Planned Economy*, 1957, p. 2.

5. Approximate investment per worker:

Name of the Industry	Capital required per person
	Rs.
Steel	1,60,000
Fertilizers	40,000
Machine Tools (graded)	25,000
Heavy Machine building plant	1,00,000
Foundry/forge plant	1,00,000
Coal Mining Machinery	60,000
Heavy Electricals	50,000
Small Industries	5,000 to 10,000

6. P.N. Dhar: *Small Scale Industries*, p. 2, 1958.

some capital from these small entrepreneurs which would not be otherwise available and thus help us in raising the total amount of capital. It has been found that the craftsman entrepreneur who has moved up by the proficiency of his craft has a great incentive to save and plough back the profits in the industry.<sup>7</sup> It is obvious that modern technology of the West (which is the product of countries which are long in capital and short in labour) cannot fit the conditions of countries which suffer from a surplus of manpower and a shortage of machines. This technology cannot produce demonstration effects, 'because of its inaccessibility to the mass of people,' who simply give up. F.E. Schumacher has therefore rightly pleaded for the adoption of 'intermediate technology', which would be vastly superior in productivity to the traditional technology (in its traditional state of decay), while at the same time being vastly cheaper, and simpler.<sup>8</sup> We can increase total output by the adoption and improvement of the technological skills available with the mass of the country artisans rather by implanting a new technology by uprooting the old one. There is the temptation of again quoting Schumacher who has very aptly pointed out that better growth can be achieved 'if people are encouraged to use the methods they know to improve upon them, to develop them by all means, even to marry them in some cases with methods imported from abroad, if that can be done easily and organically, to drop them in favour of something foreign if that happens naturally and spontaneously.'<sup>9</sup>

The decentralised industries can also help people in acquiring skills and people can be skilled upward through training and experience. As a result of this, succeeding generations easily grow up to the higher level of skill since it becomes a part of the cultural atmosphere. Textile and shoe industries in the decentralised sector can serve as skill educator, and inculcators of work discipline. These enterprises help acquiring entrepreneurial skills, attitude and thus ultimately feed large scale industries, with better managers and skilled workers. It is, therefore, rightly recognised by some thinkers in the West that underdeveloped countries like India can benefit more by using techniques which are skill and capital saving, rather than by using seemingly advanced techniques.<sup>10</sup>

Moreover, our handicrafts which are mostly based on indigenous skill and resources can also be an important source of foreign exchange earnings if adequate market research in respect of foreign tastes and preferences is

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7. *Ibid.*

8. F.E. Schumacher: *Industrialisation Through Intermediate Technology*.

9. F.E. Schumacher: *Help Those Who Need It Most*.

10. Yale and Brozen: *Entrepreneurship and Technological Change, Economic Development—Principles and Pattern*, eds. H.F. Williamson and J.A. Buttrick.

carried out. The affluent societies of the West who are of varied tastes and fashions can patronise these products with the organisation of proper marketing and publicity. Recent jump in the exports of these products bears ample testimony to the correctness of this statement.

In fine, the decentralised sector of industries can become an integral part of the economic structure provided there is the adoption of suitable technology, appropriate economic organisation and availability of adequate managerial and entrepreneurial skills. The success of Japanese industries is an illuminating proof of their soundness which have not only held their own but offered keen competition to the large-scale industries.

### Government Policy

We have already indicated in Chapter I of Book One how the British policy led to the decay of indigenous cottage industries and disturbed the occupational structure of the economy. The artisans so displaced could not be absorbed in the plantations and newly started industries. As a result, there was overcrowding in agriculture and as early as 1880, Famine Commission 1880 pleaded for positive Government action for fostering industrialisation so as to lessen the pressure on agriculture. The Government, however, stuck to its *laissez faire* policy, and took no steps to rehabilitate these industries. Even after the First World War, when Government policy did change, no steps worth the name were taken to foster the growth of small industries. The policy of protection adopted by the Government favoured large scale industries. Local Governments because of their tight financial position also could not do much in this direction. Thus there was gradual and continuous deterioration in the decentralised sector of the industries, and cottage workers could hardly eke out their livelihood.

The position, however, changed when the country became independent, and the Congress Party came into power, as it had been advocating since long for the revival of traditional industries under the leadership of Mahatma Gandhi. Industrial policy announced by the Government in April 1948, recognised the important role of cottage and small scale industries in certain types of consumer goods and enumerated the various factors which could help in their healthy expansion. Dr. J.C. Kumarappa was deputed by the Government of India to Japan in 1951 to study the working of Japanese cottage industries, and explore the possibility of obtaining some experts for improving our cottage industries. Though the Government did take some steps specially in the sphere of encouraging cloth production in the decentralised sector, not much progress was made in revitalising these industries. International Planning Team invited by the Government in 1953 to study opportunities directed towards increasing industrial production of the people in the decentralised sector<sup>11</sup> came to

11. India and International Planning Team Report on Small Industries, p. 11.

the conclusion that the development of small industries has been slow. Many small industries are now facing a crisis, are deteriorating in output and in employment.<sup>12</sup> The Team rightly pointed out that only by adopting efficient methods of production can small and village industry lay a basis for a promising long-term development. The Team made very valuable recommendations for putting them on sound footing.

As a result of the recommendations of the Ford Foundation Team and the adoption of the principle of 'socialist pattern of society' by Parliament in 1954, the New Industrial Policy announced in 1956 placed much greater emphasis on the development of industries in the decentralised sector. Various recommendations made by the Ford Foundation Team for the development of these industries were incorporated in the resolution but the pace of modernisation was to be regulated in a manner so as to avoid technological unemployment as far as possible. The ultimate aim of the state policy was to ensure that the decentralised sector acquires sufficient vitality to be self-supporting. In keeping with the spirit of the above resolution, Village and Small Scale Industries Committee popularly known as Karve Committee was asked to make recommendations for the development of these industries during the Second Plan. The Committee prepared a modest plan involving an outlay of Rs. 260 crores in Second Plan period. The main emphasis was placed on the development of textile industries, vegetable oil, handicrafts and small industries. Most of the recommendations of the Committee were, however, accepted only in principle and in Second Five-Year Plan, an outlay of Rs. 180 crores was provided. The approach adopted in the Third Plan was also in keeping with the policy, announced in 1956. Government, however, announced its intention of progressively reducing the role of subsidies, sales rebates and sheltered markets.<sup>13</sup> The growth of small industries was far from satisfactory and a sum of Rs. 236 crores was spent against the allocations of Rs. 264 crores during the Third Plan. During the Fourth Plan, the aim of Government policy is to improve progressively the production techniques so as to make them viable in the first instance and next to start them on the path of development.<sup>14</sup>

Special emphasis has been laid on the development of agro-based industries. Fiscal and other measures will be adopted to enable these industries to stand competition with large industries. Existing reservations will be continued and modified, provided there is no pronounced impact on costs. Facilities for research, improving production techniques, designs development, industrial extension services and testing facilities will be en-

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12. *Ibid.*, p. 1.

13. Third Five-Year Plan, p. 431.

14. Fourth Plan, p. 16.

larged.<sup>15</sup> The allocations for village and small scale industries have been, however, reduced to less than 2 per cent of the total outlay as against 4 per cent (approximately) during the Second and Third Plans respectively. A number of inquiries have been conducted covering various aspects and important recommendations have been made to improve the working of industries in the decentralised sector. Special mention may be made of Khadi and Village Industries Committee (Ashoka Mehta Committee) whose recommendations are to form the basis of the development of these industries during the Fourth Plan. The Committee has, inter alia, recommended a seven-year programme for the progressive improvement of techniques in respect of each of the traditional industry and subsidy element should be reduced to the minimum. The present Khadi and Village Industries Commission should be transformed into Rural Industries Commission and other Central Boards (like Handloom Board, etc.) should continue to function as expert bodies in their respective fields.

### Government Assistance

It has been rightly realised that small industries in their present state of decay cannot stand on their legs or in any case the progress would not be as rapid as is needed from the national point of view. To accelerate the tempo of development in the decentralised sector it is necessary that the Government should actively assist in all possible ways to assure them their rightful place in the national economy. These industries, in fact, need much greater fostering care of the state than large industries for adequate development. The Government has, therefore, taken steps to establish suitable organisation and follow such policies which may help the decentralised sector industries to pull them out of the stagnation into which they have fallen because of step-motherly treatment accorded in the pre-independent era.

### Organisational Set-up

The primary responsibility for the development of small industries vests in the State Governments. Directorates of Industries have been set up in states to help industries in obtaining the raw materials, electric power and grant essentiality certificates for import licence in respect of raw materials and machinery in addition to imparting training to workers. District Industries Officers have been appointed in each district to develop industries by providing necessary facilities. State Small Scale Industries Boards have been constituted to advise State Governments in the organisation and development of industries. At the district level, District Industries Committees have been set up in most of the districts to associate local opinion

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15. *Ibid.*, p. 291.

in the formulation and implementation of the programmes of development. Some states like U.P. and Punjab have also established State Small Industries Corporations on the pattern of National Industries Corporation to assist small units in respect of finance, procurement of raw materials, technical guidance and marketing of products.

Since the State Governments failed to render adequate assistance to these industries, it was felt that the Central Government should further supplement and coordinate their efforts to bring about the desired rate of progress. Six All-India Institutions have been set up, viz., (1) All-India Khadi and Village Industries Commission, (2) All-India Handicrafts Board, (3) All-India Handloom Board, (4) Coir Board, (5) The Central Silk Board, and (6) Small Scale Industries Board. Besides, Central Small Industries Organisation, National Small Industries Organisation and Central Technological Institute have also been established by the Central Government. A Centrally sponsored Rural Industries Project for intensive development of small industries has also been taken up since 1962-63. Forty-five areas were initially selected.

The Small Industry Extension Training Institute, Hyderabad, and the National Design Institute have been set up with the assistance of the Ford Foundation as autonomous registered societies. The Prototype Production and Training Centres have been set up with U.S., West German and Japanese assistance to train people in modern machine tools and for the manufacture of prototypes.

Khadi and Village Industries Commission which is a statutory body is mainly concerned with the organisation and development of traditional village industries like khadi, ghani oil, tanning of hides, manufacture of gur and khandsari and processing of cereals and pulses. The Commission undertakes to train the rural manpower in these industries, encourages and promotes research, provides for the sale and marketing of products and ensures the supplies of raw materials and implements to artisans at reasonable prices. Financial assistance is also provided on a limited scale to State Khadi Village Industries Boards, State Government registered institutions, cooperatives and other statutory organs engaged in the development of khadi and village industries.

The All-India Handicrafts Board set up in 1952 undertakes to revitalise and develop the handicrafts of the country which were so famous in ancient times and earned reputation and pride for our skilled artisans. The Board has set in motion several schemes for improvement of the techniques of production, standard of quality, adoption of latest and modern designs and facilities for marketing.<sup>16</sup> These handicrafts which are skill intensive can be a very important source of foreign exchange earnings

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16. R.V. Rao: *Cottage Industries and Planned Economy*, p. 74.

with the adoption of the latest designs and organisation of proper publicity in foreign countries.

The Coir Board is engaged in producing and popularising products of coir industry which is of major importance only in Kerala; while Central Silk Board looks after the development of silk and sericulture which is mainly important in Mysore, West Bengal, Assam, Jammu and Kashmir. All-India Handloom Board attends to the problems of handloom cloth industry.

As a sequel to the recommendations of the Ford Foundation Team great stress has been laid on the development of small-scale industries which are mechanically operated and owned by small entrepreneurs not having a capital investment in plant and machinery of more than Rs. 7.5 lakhs. These industries may be ancillary or subsidiary to modern large scale industries. They may also cater to the demands of consumers in respect of new types of consumer goods and are generally located in urban centres. Important examples are flour mills, printing presses, leather footwear, light engineering goods, electrical engineering, hosiery, soap making, drugs, and electroplating. Small Scale Industries Board, Central Small Industries Organisation, Small Industries Services Institutes, Industrial Extension Centres, National Small Industries Corporation Limited, etc., mainly attend to the varied problems of these small scale industries.

As in agriculture, the organisation of artisans and small entrepreneurs has been considered essential. The cooperative societies serve as venue of Government aid to workers and can make representations to get their grievances removed in the sphere of marketing and finance. Cooperatives either undertake production and sales activities or offer supply, sales and other services to their members. In small-scale industries and handicrafts, the 'service' and 'assembly' types of cooperative societies are more suitable than 'production' type which has taken some roots in industries like handloom, powerloom and coir. The National Federation of Industrial Cooperatives was registered in March 1966 to assist member cooperatives in the purchase of raw materials and to undertake export and wholesale marketing of products of industrial cooperatives. The Federation has been recognised as a 'letter of authority' for import of goods on behalf of Industrial cooperatives. By 1967-68 there were 53,900 cooperatives in the industrial field with a membership of 38.7 lakhs and a working capital of Rs. 323 crores. The Ford Foundation Team recommended that these societies should help members in procuring raw materials, arranging for the necessary finance and marketing of finished products rather than associate the cooperators in the act of production.

Thus, both the Central and State Governments are cooperating in developing industries in the decentralised sector. Their role in the various spheres can be judged by the Fourth Plan allocations which are shown in the table given below:



## Outlay for Village and Small Industries in Public Sector

(Rs. Crores)

S.No.	Industry	Estimated Ex- penditure		Outlay for 1969—74			
		Third Plan	1966—69	Centre sponsored	Centrally sponsored	State & Union territories	Total
1.	Small-Scale Industries	86.12	39.35	37.65	..	66.60	104.25
2.	Industrial estates	22.15	7.58	..	..	19.08	19.08
3.	Handloom Industry	25.37	13.58	4.50	..	27.08	..
4.	Powerlooms	1.52	.47	..	..	7.77	39.35
5.	Khadi	89.33	55.41	59.00	..	1.47	96.47
6.	Village Industries			36.00			
7.	Sericulture	4.39	3.80	2.00	..	8.39	10.39
8.	Coir Industry	1.79	1.28	1.50	..	3.53	5.03
9.	Handicrafts	5.30	4.53	8.00	..	5.46	13.46
10.	Rural Industries Projects	4.79	6.55	..	4.50	..	4.50
11.	Collection of Statistics	..	..	..	.60	..	.60
Total		240.76	312.55	148.6	5.10	139.38	293.13

A perusal of the above table shows that State Governments will contribute about 47 per cent while the Central Government will finance the remaining 53 per cent of the outlay. In the Third Plan, the State Governments provided 53 per cent of the outlay as against 47 per cent provided by the Central Government. State Governments attend mainly to the development of modern small scale industries, handlooms, powerlooms, sericulture and coir spinning while Central Government is primarily concerned with village industries, handicrafts and providing facilities to modern industries in respect of training, research, designing and investigation. Analysing the data from another point of view, we find that a little less than half of the amount is allocated to the development of modern small-scale industries and handicrafts while village industries (excluding Khadi but including sericulture and coir industry) have received less than 1/5th of the allocations. About a third of the amount is proposed to be spent on textile industries. Though there is slight increase in the amount allocated to the village industries as compared to the Third Plan but it is unfortunate that the development of rural industries has not received the due attention of our planners and the allocations have been reduced to less than 2 per cent in Fourth Plan as against 4 per cent in the previous two plans.

## Measures of Assistance

A number of measures have been taken by the Government to render

assistance in the field of production, financing, marketing and research which are discussed here briefly.

Many of the small-scale units are situated in the premises which not only affect the health of workers but also the efficiency of production. With a view to meeting this deficiency, it has been decided to establish industrial estates to provide factory accommodation to industries at suitable sites with facilities of water, electricity, steam, transport, banks, post offices, etc. By bringing similar types of units together, common servicing centres are also established, and purchasing of raw materials and selling of finished goods is also rendered easier.<sup>17</sup> In brief the underlying idea is the provision of necessary infra-structure for the orderly and well-balanced growth of small scale industries. By March 1969, 346 industrial estates have been completed. The small units set up in these estates provided employment to 82,700 and the annual production amounts to Rs. 100 crores. However, facilities provided in all estates have not been fully utilised as some of the estates have been planned without proper investigation of the industrial potentialities of the area, and in others there are inadequate facilities.<sup>18</sup> Estates planned in rural areas have not been very successful because of the inadequate availability of local entrepreneurs. International Perspective Planning Team came to the conclusion that the real costs of the programme have been very high, and has emphasised the need for correct location of the estates and effecting reduction in construction expenses. Further, industrial estate policies should aim for a catalytic or multiplier effect.<sup>19</sup>

For providing technical training and technical assistance in the modern techniques of production, 16 full-fledged Small Industries Service Institutes (one in each state and one in the Union Territory of Delhi), five Branch Institutes and 64 extension production/training centres have been set up by Central Small Scale Industry Development Organisation. Services of foreign consultants have been obtained largely as a result of the financial assistance from the Ford Foundation. These consultants demonstrate the use of modern machines and latest processes of production and introduce improved designs of goods in addition to designing machines and tools suitable for different processes.

Indian technicians are also sent abroad for technical training. Besides training personnel, these institutes and centres offer advice to prospective entrepreneurs in the selection of industries, choice of raw materials and substitutes and guide them to the various organisations which may ren-

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17. Bulletin of Small Industries, December 1963—"Industrial Estates Programmes."

18. *Commerce*, dated 26th March, 1966.

19. Based on the Report of the International Perspective Planning Team submitted to the Government of India, Ministry of Commerce, 1963.

der assistance. Technical officers pay visits to offer on-the-spot technical advice. They collect and supply marketing data on different industries. Investigations are carried out to assess the progress of industries and suggest programmes for their future development. Mobile demonstration workshops fitted with modern machines have also been arranged for rural areas. Technical bulletins and pamphlets giving brief accounts of modern techniques have also been prepared.<sup>20</sup>

In addition to the above activities of Central Small Industries Organisation, All-India Handicrafts Board is running 15 pilot centres for training and research in production. The All-India Sericulture Training Institute and four regional training institutes provide practical and theoretical training in sericulture. The Khadi and Village Industries Commission has also initiated several schemes for improving the productivity of traditional village industries. The Ambar Charkha scheme which was given so much publicity has not, however, proved a success.<sup>21</sup> The National Coir Training and Designing Centre trains people and evolves improved designs for coir products. Prototype production centres are also providing training in modern machine tools.

The Government also accords preference in allocating supplies of raw materials both imported and indigenous. The necessary arrangements are made by State Governments. In respect of these supplies of controlled raw materials special quotas are given to the states for small industries. However, the position is far from satisfactory and many units are facing acute difficulty in respect of raw materials and have to work below capacity. International Perspective Planning Team found that the supplies were inadequate and irregular. Loknathan Committee (1965) has pointed out that allotted scarce raw materials were adequate to meet only 1/3rd of the requirements of the small sector whereas units in large scale sector were able to utilise between  $\frac{1}{2}$  and  $\frac{2}{3}$ rd of their productive capacity. The position has now very much eased but full requirements are not yet met. Similarly they are not able to get their requirements of electric power in several states and the rates too are high.

Lack of finance is a serious drawback as the artisans and small-scale industries do not have sufficient funds of their own for installing modern machinery and tools, and storing raw materials and finished products.<sup>22</sup> There are various channels through which finance is obtained. State Governments provide a limited measure of financial assistance under State Aid to Industries Acts. Nationalised banks, State Bank of India and its subsidiar-

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20. Engineering News of India June, 1964, 'Industrial Extension Services for Small Industries by J.K. Basak.

21. *India* 1965, pp. 312-15.

22. Reserve Bank of India: Seminar on Financing of Small Scale Industries of India, 1959—Vol. II, p. 3.

ies now provide credit facilities for working capital as well as long term loans. Various All-India Boards also provide financial assistance to industries coming within their purview; state financial corporations and cooperative banks also provide financial help to medium and small-scale industries. To encourage the lending institutions to take risk, Reserve Bank has formulated 'credit guarantee scheme' on the recommendations of the Seminar on Financing of Small Scale Industries which became effective from January 1, 1963 for the whole of the country. Under this scheme guarantee organisation shares the losses of lending institutions on certain terms and conditions. Up to December 1968, the guarantee organisation issued guarantees for Rs. 356 crores in respect of 82,387 applications. Under the liberalised scheme in operation since 1966 maximum amount recoverable from the Government has been doubled to Rs. 2 lakhs in respect of any loan and the number of institutions eligible for such risk sharing has been expanded from 97 to 454 by the inclusion of some Central Cooperative Banks and non-Scheduled Banks.<sup>23</sup> Besides, Small Industries Corporation also supplies machinery on hire-purchase basis to modern small-scale industries and has supplied indigenous and imported machinery worth Rs. 40 crores to more than 9,000 small scale units. In addition, as already indicated, industrial estates are also being financed by the Government.<sup>24</sup> On the recommendations of Working Group appointed by the Reserve Bank of India, it has now been decided to advance loans to the State Cooperative Banks for financing 22 broad groups of small industries including coir, sericulture, handicrafts, oil-crushing, leather goods, hand-pounding of cereals and general engineering.

However, only a fraction of the total financial requirements is being met and special difficulty is felt by village industries and urban handicrafts because of their low credit-worthiness; slow growth of cooperatives has also hindered Government help. With the nationalisation of commercial banks it was expected that financial assistance to these industries would considerably improve. But as yet, there has not been much change in their loan policy.

23. *Economic Times*, dated 10th July, 1966.

24. Estimated amount of financial assistance provided to Small Scale Industries for fixed investment:

	<i>Rs. in crores</i>
State Aid to Industries Act	18
State Financial Corporations	15
Hire Purchase Machinery	19
Industrial Estates	28
	<hr/>
	80

Private Resources of Entrepreneurs Rs. 160 crores.

Source: Report of the Sub-Group on Small Scale Industries 1965, p. 25.

## Marketing

A number of useful steps have been taken to increase the demand and popularise the products manufactured in the decentralised sector. Certain lines of production or categories of goods have been reserved for them. Production of certain varieties of cloth and manufacture of agricultural implements has been reserved for decentralised sector. Extension of further capacity in some large-scale industries like vegetable oils, leather footwear, match, etc., has been prohibited. Common production programmes have been formulated in respect of industries like bicycles, sewing machines, storage batteries, etc.

A large number of sales emporia and depots have been set up by All-India Boards and State Governments to popularise these products. The work of the All-India Handicrafts Board and Khadi and Village Industries Commission deserves special mention and has gone a long way in popularising the products in urban classes. For popularising these products in foreign countries, Handicraft and Handloom Exports Corporation has been established.

Small Industries Service Institutes collect and supply information about foreign markets, overseas trade regulations and prices. Assistance is provided in the preparation of export documents and publicity literature. Specialised courses are being organised in the field of export marketing. Selection is also made of products which have export potentials and information is provided to the prospective exporters. State Trading Corporation is also operating a scheme known as 'Export Aid to Small Scale Industries'. A committee has also been set up by Small-Scale Industries Board to examine the bottlenecks and drawbacks in the small scale sector in regard to exports and recommend ways and means of resolving the difficulties.

The Government has liberalised its stores purchase policy. Certain items are exclusively procured from the small-scale units, and in other items a price preference of up to 15 per cent is given over the quotations of large scale units. The Central Small Industries Organisation and the National Small Industries Corporation are working in close cooperation with the D.G.S. and D. and the State Directorates of Industries actively assist in procuring orders from the Government for small-scale units. As a result, purchases of D.G.S. & D., Railways, P and T. Department and State Governments have increased many times.<sup>25</sup> Small scale units have so far been able to secure orders of well over Rs. 180 crores from Central Government agencies. In 1968, 17,989 small units were registered for the supply of stores against Government orders.

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25. Information is based on Small Scale Industries and Government Stores Purchase Programme—a publication of Central Small Industries Organisation.

To ensure improvement and quality, quality marking schemes have been taken up by several agencies. The National Small Industries Corporation has introduced 'Jansewak' for selling products of small entrepreneurs through its own agencies. Punjab and U.P. Governments have also introduced 'Quality Marking Scheme' to infuse confidence in the consumers regarding the genuineness of the quality.

Fiscal concessions in the nature of rebates specially for the village industries, and exemption from sales tax and excise duties have been provided by the Government. In some cases, cess has been levied on the large-scale industries to provide funds for the decentralised sector. The schemes of rebates and subsidies are being gradually withdrawn.

### Progress of the Industries

No comprehensive data are available regarding the progress of various industries in the decentralised sector, as these industries are widely scattered and do not furnish any statistical returns. Moreover, the work of development is also entrusted to several agencies and there is no effective co-ordination between their work.

It is now proposed to improve the collection of statistics. Annual statistics for small scale industries coming within the purview of Factories Act will be collected in a phased manner. Data for other units employing 5 or more workers will be collected on a sample basis for all states. The data in respect of small industries coming within the purview of Factories Act show that there were 40,261 factories constituting 92 per cent of all registered factories in 1962 employing 1.43 million workers or 36 per cent of the total registered employment. Their gross value of output exceeded Rs. 1,500 crores or about 30 per cent of the total output.<sup>26</sup> Their gross output has been estimated at Rs. 2,244 crores in 1965-66.

Small industries occupy a dominant position vis-a-vis large scale industries in knitting, grain milling, tanning, canning and preservation of fruits, musical instruments, leather products and saw mills. Their contribution is also significant in metal working and machinery industries and the total output amounted to Rs. 218 crores in 1960. Most of these industries are of recent origin and have developed largely in response to the programmes of the C.S.I.O. and the states departments which were launched in the mid-1950's. Starting from a low small base, they have grown rapidly showing significant relative rates of growth, although in absolute terms their contribution to national income has not gone up substantially and is only 3 per cent.<sup>27</sup> However in states like Punjab, Delhi and west U.P. these industries occupy a very dominant position and are largely responsible for

26. *Economic Times*, dated 30th June, 1966.

27. Planning Commission: Report of the Sub-group on Small Scale Industries, 1965, p. 19.

the prosperity of these areas. Working group proposes to double the output at Rs. 4,500 crores in small-scale registered factories during the Fourth Plan period.

The textile industry in the decentralised sector has made significant progress. Total production of cloth in the decentralised sector at the beginning of the First Plan amounted to 814 million metres accounting for less than 1/5th of the total production. At the end of the Third Plan there was almost four-fold increase and the production amounted three thousand million metres. At the beginning of the Fourth Plan the production is 3,600 million metres<sup>28</sup> and is expected to increase to 4,250 million metres. The decentralised sector now contributes about 45 per cent of the total production but there will not be any significant change during the Fourth Plan in the relative contributions of mill sector vis-a-vis the decentralised sector. The production of raw silk has also shown considerable increase and amounted to 23 lakh kgs. in 1968-69 compared to 15 lakh kgs. in 1960-61. The value of exports has risen four-fold during this period. Sericulture industry provides part-time employment to 3 million persons.

According to 1961 census, about 1 million persons were engaged in handicrafts and produced goods worth Rs. 250 crores. There has been further increase in the production which amounted to Rs. 317 crores in 1966. There has been a big jump in the export of our handicrafts as they are increasingly catching the fancy of foreigners because of better publicity. The value of exports increased from Rs. 19.34 crores in 1961-62 to Rs. 76.5 crores in 1968-69 and have recorded four-fold increase. There has, however, been only marginal increase in the production of coir yarn and products during the Third Plan, but value of exports has steadily increased from Rs. 8.7 crores in 1960-61 to Rs. 14.50 crores in 1968-69.

As regards the progress of industries falling within the purview of Khadi and Village Industries Commission, no comprehensive data are available. Production and employment statistics are available only in respect of centres assisted by the Commission. These centres provide part-time/full-time employment to 21 lakh persons and the value of production amounted to Rs. 75 crores in 1967-68. But the total value of production at these centres during 1964-65 amounted to Rs. 138.96 crores. Decline in production appears to be due to gradual reduction in the rebates and subsidies. Much-publicised Ambar Charkha programme has failed and the Commission is engaged in devising an improved model of 'All Metal Charkha'.

Because of increasing facilities made available, there has been significant growth in the number of industrial cooperatives. Between 1961 and

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28. *Economic Survey, 1969-70.*

1969 their number increased from 37,000 to 51,000 and the total value of goods sold by them increased from Rs. 112 crores to Rs. 332 crores.

The above discussion should not lead us to the conclusion that the decentralised sector of industries has made significant progress. It is, no doubt, true that small-scale industries coming within the purview of factory establishments have recorded good progress but the contribution of decentralised sector as a whole to the national income is more or less static and it has failed to keep pace with the growth in other sectors of economy. We are concerned more with relative growth rather than with absolute growth. We have, therefore, to judge the progress of this sector in terms of its percentage contribution to national income and percentage employment that it offers to the working population.

Small enterprises which contributed 5.9 per cent of the national income in 1960-61 accounted for only 5.4 per cent of the income in 1968-69. By 1973-74, their contribution to national income is further expected to decline to 5.3 per cent.

According to the data of 1961 census, the net output per worker in small enterprises amounted to Rs. 515 per annum as against Rs. 570 in agriculture and Rs. 2,966 in mining and factory establishments. As indicated earlier, there has been practically no change in the occupational pattern of the country between 1951-61.

Thus, we can categorically conclude that there has been no progress in the decentralised sector of industries in terms of its contribution to national income and employment and it has failed to keep pace with the growth in other sectors of the economy.

Inadequate progress has been due to comparative neglect of decentralised sector on the part of the Government. Though financial allocations have successively increased in each successive plan from Rs. 43 crores in First Plan to Rs. 264 crores in Third Plan, the percentage allocation remained constant at 4 per cent in Second and Third Plans. In the Fourth Plan for 1969-74, only 1.8 per cent of the total amount has been allocated to the development of village and small industries. Allocations for Khadi and village industries have not been kept even at 1 per cent of the total outlay.<sup>29</sup> The allocation of All-India Handloom Board was placed at Rs. 34 crores as against its demand of Rs. 140.19 crores.<sup>30</sup> Similarly a sum of about Rs. 5.5 crores has been provided in the first three years of the Plan for rural works as against the provision of Rs. 150 crores for the Third Five-Year Plan.<sup>31</sup> The Estimates Committee was therefore constrained to observe that Rural Works Programme did not make any significant impact

29. Report of the Khadi and Village Industries Commission, 1964-65.

30. Report of the Working Group on Handloom for the Fourth Plan.

31. Fifty-fifth Estimate Committee Report of the Third Lok Sabha in Rural Works Programme, p. 1.



on rural economy.<sup>32</sup> Rural industries are the first victims of the axe of economy in expenditure. Even in Fourth Plan, a sum of Rs. 4.50 crores has been provided for rural industries projects against an estimated expenditure of Rs. 6.55 crores incurred between 1966-69.

The progress of rural electrification has been far from being satisfactory. By March, 1966, about 43,000 towns and villages had been electrified representing about 8 per cent of the total towns and villages. Except in Madras, Kerala and Punjab, in all other states the progress has been very tardy because the generation of electricity has lagged far behind the demand.<sup>33</sup>

Apart from the inadequate allocations, Government policy has also not been favourable. The Karve Committee had recommended the prohibition of rice mills, but a large number of rice mills are being established with the imported machinery. Compulsory supply of cane to sugar mills also adversely affected the small industry. The prohibition of powerlooms under the pressure of cotton mills is a pointer towards none-too-favourable policy of the Government.<sup>34</sup>

In pursuance of the Powerlooms Enquiry Committee, 1,05,000 powerlooms were allotted to the states and Union Territories, of which only 14,000 powerlooms had been installed by the end of June 1969. The licensing policy of the Government was not properly conceived and implemented. Little protection has, therefore, been afforded to the decentralised sector. Further, liberalisations in licensing will strike a death knell to these industries. Schemes of rebates and subsidies have not been properly administered and in many cases there has been premature diminutive termination of financial assistance. There has been meagre effort to evolve suitable 'intermediate technology' for the benefit of small-scale industries as there have been inadequate allocations for research in this direction.

D.R. Gadgil has, therefore, rightly remarked that decentralisation with its emphasis on small industries has been the accepted policy of the Government but all these years little effort seems to have been made according to that approach, and the idea of common production programme has receded more and more into the back-ground, and has not attained the degree of desired success.<sup>35</sup> As a result, the difficulties of marketing the products of the village and small sector industries have tremendously increased, and there has been no enthusiasm in the minds of artisans to continuously strive to improve their production by adopting improved technology which

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32. *Ibid.*, p. 5 of the Report.

33. *Commerce*, dated 25th June, 1966; "Rural Electrification" by S.C. Sarkar.

34. Report of the Sub-group on Small-Scale Industries, 1965, p. 73.

35. D.R. Gadgil: *Planning and Economic Policy in India*—Preface.

will reduce both the cost of production as well as the selling price.<sup>36</sup>

The lack of coordination between different agencies connected with the development of these industries has also impeded progress. The Karve Committee had emphasised the need for proper coordination and recommended the setting up of a separate Ministry at the Centre.<sup>37</sup> But the problem has not yet been properly tackled and the need for an integrated approach is still being felt especially in case of rural industries.<sup>38, 39</sup>

### Future Strategy

In view of the need to reduce pressure on agriculture and provide employment to the growing number of unemployed persons, it is necessary that village and small industries be given the necessary encouragements by the Government.

A perusal of Fourth Plan leads to the conclusion that no bold attempt has been made to encourage the development of industries in the small-scale sector. It is, thus, clear that with the present approach and area of efforts no substantial progress can be made in this direction.<sup>40</sup> As such the Government should make an all-out effort to develop these industries and in this connection the following suggestions may be of value.

There should be coordination between large-scale and small-scale industries by working out inter-related programmes of production.<sup>41</sup> Production programmes should be so arranged that they not only dovetail into each other but also mutually strengthen and sustain each other. For this purpose a certain amount of regulation among the sectors and even inter se among sections in these sectors is necessary. But up to now this regulation has neither been properly conceived nor effectively enforced.

Proper investigations should be undertaken to find out the fields of suitable reservations for small industry and to find ways and means to make the common production programmes effective by extending all possible assistance to the small-scale industries.

The practice of contracting and sub-contracting should receive due

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36. Report of the Working Group on Khadi and Village Industries, 1964, p. 14.

37. P. 83 of the Report.

38. Report of the Study Group on the Welfare of the Weaker Sections of the Village Community, Vol. I, p. 22.

39. Report of the Working Group on Khadi and Village Industries, 1964, p. 63.

40. Note on Rural Industrialisation submitted by D.R. Gadgil to the Rural Industries Planning Committee.

41. Seminar on Financing of Small-Scale Industries in India, Vol. I, p. 5. Inaugural Speech of H.V.R. Ienger.

encouragement at the hands of large-scale industries both in the public and private sectors.

In Japan as many as 54 per cent of the total small-scale enterprises are engaged in sub-contracts, and they account for 17 per cent of the total production of the large-scale units. Technological and financial assistance is provided by the parent or assembly firm. By encouraging sub-contracting units, considerable reduction in the cost of final product can also be achieved.

In engineering industries in our country the large-scale sector should restrict its manufacture only to the parts requiring heavy precision.<sup>42</sup> The system of sub-contracting has not yet been developed to any appreciable extent<sup>43</sup> in our country. Public sector units should take lead in this matter by extending technological and financial assistance. This system will provide greater employment opportunity to technologist-entrepreneurs.

A programme of research to enable small units to adopt appropriate technology which is much superior to the traditional technology and at the same time simple to operate, should be further intensified.

The success of decentralised industries depends in a great measure on the adoption of appropriate technology by which the workers may earn sufficient amount for their livelihood, and at the same time save something for investment in their enterprises. Technological progress must manifest itself not only in increased total output but also in a rise of productivity and a simultaneous increase in the employment potential.<sup>44</sup> In this sphere the initiative for finding appropriate tools and techniques will have to be taken by Indian technologists because the Western technology does not fit into our requirements. It is necessary to take up and implement with all speed a massive programme of modernisation of not only of equipment and machinery but also of management for small-scale industries so that they may hold their own in market competition.

Development of necessary infrastructure is also essential if these industries are to grow and assume their rightful place in the national economy. Development of road transport, provision of electricity, adequate finance and strengthening of cooperative organisation, are very essential in this connection. Separate departments or cells should be opened in all nationalised banks to deal exclusively with small-scale industrial units so that the needs of this priority sector may receive proper attention. In fact, the Government will not only have to create congenial type of climate for their growth but also find seeds which may flourish in that climate.

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42. National Small Industries Corporation: *Collaboration between Heavy Industries and Small Industries Units*, 1960, p. 2.

43. Report of Indian Productivity Team on Small-Scale Industries in U.S.A., West Germany, Sweden and Japan, p. 72.

44. *Khadi and Gramodyog Journal*, March 1966: 'Technological Progress and Growth in Economic Activity' by B.K. Roy.

Export potentialities of small-scale units have not yet been realised fully. Recent jump in the exports of handicrafts which are skill intensive is a pointer in this direction. Even the products of modern small-scale units specially items like castings, forgings, semi-finished parts and components which are labour intensive can find ready market in countries like Japan, West Germany, etc., with suitable organisational set-up. Deficiency in overseas market research should be made up so as to provide information regarding the countries to which they can export and the particular products which have good export potential. Assistance should be provided in the development of better designs which will continue to have ready market in foreign countries.

The administrative set-up will have to be overhauled to ensure efficient action and top level coordination between the various organisations engaged in tendering assistance to the small-scale enterprises. It would be better if a separate Ministry is created at the Centre to impart urgency to the task. A recent delegation<sup>45</sup> has rightly recommended for giving a statutory basis to the small enterprise development in the country as is the case in several other countries like Japan and U.S.A.

In fine, the Government has not yet paid the attention necessary for the development of village and small industries. There has been wide divergence in its practice and precept, and there is sufficient evidence to show that it has accorded more favourable treatment to large-scale industries. There is still insufficient realisation of the role of these industries in the development of the economy. But the case of Punjab is an illuminating evidence of the prosperity which small industries can bring to a large mass of people, as these industries have much more expansionary effects on the economy. It, therefore, behoves the Government to develop these industries by making suitable financial allocations and streamlining its administrative machinery.

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45. Report of the Indian Government Delegation to Japan to study Small-Scale Industries (1969).

## CHAPTER XII

### CONCLUSION

#### AN APPRAISAL OF THE ECONOMIC DEVELOPMENT AND PLANNING STRATEGY IN THE POST-INDEPENDENCE PERIOD

The urge for independence which had been gathering momentum because of the exploitation of people by the colonial power was fulfilled on 15th August, 1947. The political emancipation brought in its train problems which were undreamt of before. The New Government of India came into office at a moment when acute war-time shortages still persisted, when business confidence had been shattered and when the country's economy already under strong inflationary pressures was bleeding and disrupted by the act of partition.<sup>1</sup>

As soon as the problems emerging from the division of the country subsided, the Government set about the urgent task of generating on accelerated process of cumulative and self-sustaining economic growth. The political revolution made it imperative for the Government to accomplish the economic development of the country at the quickest possible pace. The country had to traverse the ground in a few decades for which the present-day advanced economies of the world took more than a century. Moreover, the progress was to be achieved within the framework of socialistic pattern of society.

With a view to achieving rapid economic growth, the National Government adopted economic planning. Only under an era of planned economy could the country make most effective and balanced use of its resources<sup>2</sup>—material and human—and take suitable steps for augmenting those resources which were found to be deficient in relation to nation's requirements. The ideal of 'mixed economy' was adopted and the Government undertook to supplement and coordinate the efforts of the people in the task of rapid economic development.

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1. Bengal Chambers of Commerce and Industry, *A Centenary Survey*, p. 169.

2. The widespread adoption of planning stems principally from the urgency with which the developing countries view the task of overcoming their economic backwardness and promoting their social advance.

Source: U.N.—'Planning for Economic Development,' 1963, p. 1. Report of the Secretary-General transmitting the study of a group of experts.

The decision to set up the Planning Commission was announced by the Finance Minister in his budget speech in 1950. The draft outline of the First Five-Year Plan was placed before the Parliament in October 1951. It was the first step in the series for generating a rapid increase in national product. Since then two more Five-Year Plans have been prepared and executed; the Fourth Plan is in the process of implementation.

### Progress Under Plan Period

We shall in this chapter examine critically whether the progress achieved has been commensurate with our expectations, and how far the objective of socialistic pattern of society has been attained. We shall also compare our progress with that of the other countries placed in similar situations so as to find out whether our country has been able to keep pace with the other nations. It is now recognised all the world over that the developing countries have to show a higher rate of growth for bridging the gap between developing and developed countries. In the end, we shall suggest measures for achieving a higher rate of growth.

Reviewing the progress from the available data one finds that our economy which was in a static condition has begun to move forward. Every Five-Year Plan has been a stepping-stone to greater progress. It is undeniable that the progress during the period has been more marked than in any other decade in the pre-Independence era. According to the estimates of national income prepared by the Government there has been 91 per cent increase (at 1948-49 level of prices) during the 20 years ending 1967-68, which has been shared by all the principal sectors of the economy. However, more than proportionate increase has been contributed by industrial and tertiary sector which is indeed a welcome sign. In all the advanced countries of the world the percentage contribution of agriculture to the total income has shown a declining trend over a period of time. The Government share in the net domestic product has also increased from 7.4 per cent in 1948-49 to 12.5 per cent in 1967-68 and shown an upward trend since it has begun to take positive interest in the development of the national economy and to invest heavily in several industries, specially heavy industries, requiring massive investment which cannot be undertaken by the private sector.

Side by side with the increase in national income, the savings and investments have also shown a continuous upward trend. Savings which amounted to Rs. 483.1 crores in 1950-51 rose to Rs. 2,530 crores in 1968-69. Urban sector savings are more than thrice the rural savings. A remarkable feature is the greater mobilisation of savings in Government sector through taxation which contributes more than a quarter of the total savings. As a percentage of national income, the savings amounted to 9 per cent in 1968-69 as against 5 per cent in 1950-51. Growth in investment has

been still higher since we have been receiving substantial assistance from foreign countries for economic development.

In the First Plan real investment amounted to Rs. 3,551 crores which in the Third Plan increased to Rs. 10,843 crores but the average annual rate of growth has declined from 22 per cent in the First Plan to 10 per cent in the Third Plan. By the end of the Fourth Plan the average annual rate of investment is expected to go up to 14.5 per cent.

Our progress however does not stand comparison with that of the other countries placed in similar situations. What is all the more disturbing is the fact that the growth rate instead of increasing has tended to decelerate specially since the beginning of the sixties. In the Third Plan period our progress has been much below our expectations. Our share in total industrial output in ECAFE region which stood at 15.3 in 1958 declined to 12.6 per cent in 1961. Even small developing countries like Malaya, Thailand, Mexico and Korea have achieved higher rates of growth in comparison with us.<sup>3</sup> Recent devaluation of the rupee is a clear proof of our failure to make sound plans and implement them effectively.

The much-publicised socialistic pattern of society has been merely a slogan for catching the votes, and almost the entire increase in national income has been manipulated by the upper classes, and much to our dismay, the Government has failed to bring any relief to the poor classes specially landless labourers in the villages. The data contained in the Agricultural Labour Enquiry Committees 1950-51 and 1956-57, are a clear pointer to the deteriorating economic condition of the rural masses. The Mahalanobis Committee has also reached the conclusion that there is a substantial concentration of economic power and control in the hands of some people. Decrease in the demand of coarse and medium cloth in the

3. Average annual rate of growth of real gross domestic product at factor cost:

		<i>Total growth</i>	<i>Per capita</i>
India	1950-60	3.7	1.9
	1960-62	2.6	.2
Burma	1950-60	6.3	5.1
	1960-63	4.0	— .2
Korea	1953-60	4.5	2.4
	1960-63	4.8	1.9
Malaya	1955-60	4	.9
	1960-62	5.9	2.5
Mexico	1950-60	6.1	2.9
	1960-63	4.9	1.7
Pakistan	1950-60	2.6	.5
	1960-63	5.5	4
Thailand	1951-60	6.4	2.5
	1960-63	5.5	2.4

Source: U.N.O., *Year Book of National Accounts Statistics* (1964), p. 373.

face of rising demand for luxuries like 'motor cars, air conditioners, refrigerators, etc., again leads to the same conclusion that gap between 'haves' and 'have-nots' has widened further. As many as 70 per cent of the rural population can spend only 50 Paise per day. Employment and under-employment is rife in rural areas.

### Growth in Population

A noteworthy feature of the period under review has been the appalling growth in the population which is the highest in the demographic history of the country.<sup>4</sup> The increase in population has mainly been brought about by reduction in the death rate especially infantile mortality on account of improved public health measures and is not due to any rise in the living standards of the people. All our efforts of raising the living standard of people have been severely stultified by the higher growth rate. As a result, the per capita income during the 20 years ending 1967-68 has risen by 30 per cent showing a rise of about 1.5 per cent. Population explosion has posed a serious challenge to the nation.

### Agricultural Production

Though the growth in agricultural production has been correspondingly more than the rise in population yet food imports have continued and increased specially in the Third Plan. In spite of the progress achieved, our productivity per acre remains one of the lowest in the world. The ideal of self-sufficiency visualised in the First Five-Year Plan is far from being achieved. Not only that we have been unable to spare for the exports as much as we used to especially in regard to oilseeds, cotton, etc. Our consumption is increasing at a higher rate than the increase in production.<sup>5</sup>

### Industrial Progress

As compared to agriculture, rate of industrial progress has been much higher as a result of active State assistance. The index number of indus-

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4. Annual growth rate between 1951-61 was 2.2 per cent as against 1.5 and 1.4 per cent in the preceding two decades. The country's population increased by 78 million to 439 million between 1951-61 whereas in the previous 40 years it recorded an increase of less than 110 million.

5. The per capita availability of food per day in terms of calories has increased from 1,740 in 1951-53 to 2,000 calories in 1960-62, which is still short of the minimum required by 300 calories. The nation has not shown enough restraint and is not prepared to make the necessary sacrifices, e.g., in a country like Japan where there has been an increase of 330 calories per day as against 260 in India during the same period while her per capita income during this period has risen by about 6 times in comparison to India.

Source: *Economic Bulletin for Asia and Far East*, June 1965, p. 43.



trial production which stood at 73.5 in 1951 (base year: 1956=100) has climbed up to 191.1 in February 1966. There was stagnation in production during 1966 and 1967 and since then there has been about 7 per cent increase in production. Not only old industries like textiles, sugar, cement, etc., have expanded their production but new industries like engineering, electrical machinery and chemicals, etc., have also made their appearance on the industrial scene. The Government has not only developed the infrastructure for the growth of the industries but also entered in several lines in a big way where it was felt private sector could not make adequate progress (e.g., steel, engineering, petroleum, chemicals, etc.). But here again the progress has been much below our expectations and our record does not compare favourably with that of other countries.\* East European countries like Bulgaria, Hungary, Yugoslavia have exhibited wonderful progress. Most of these countries which were mainly agricultural at the time of the First World War have not only been able to absorb all increase in their population in industrial sector but also have drawn a considerable portion of the population from agriculture; while in our country there has been virtually no change in the occupational pattern and agriculture has continued to be the main occupation of about 3/4ths of our population. Industry gives employment to less than 10 per cent of the total population.

The percentage rate of growth should not therefore lead us to the conclusion that India is a highly industrialised country. Judging from the criterion of per capita consumption of cement and steel (in kg.), we find that our record is one of the lowest in ECAFE region as is clear from the table given below.<sup>7</sup>

Most of the industries started in the post-Independence period are meant for meeting indigenous demand and are dependent on foreign supplies not only for the capital goods but also for raw materials. The efficiency of the newly started industries is low, and they are unable to push their products in the world markets even after the recent devaluation of the rupee. Protective umbrella provided by the Government has secured the entire home market where the demand has continued to rise unabated

6. Index numbers of industrial production (Base year: 1958=100):

Year	India	Japan	Australia	Bulgaria	Hungary	Czechoslovakia	Yugoslavia
1948	64	22	36	22	38	33	43
1953	74	60	66	55	82	64	53
1963	152	222	131	188	159	143	171

Source : U.N. Statistical Year Book, 1964.

7. A Decade of Industrialisation in Asia and Far East, p. 18.

	Australia	Ceylon	India	Iran	Malaya	Pakistan	Thailand	Japan
Cement	275.8	28.6	19	36.3	85.8	14.8	29.3	284
Steel	334	19	14	17	37	6.6	11	242

on account of inflationary pressures. The units both in the public and private sectors are not cost conscious and have made little effort to improve their efficiency. They are the products of much less deliberation as regards costs, optimum size and proper location. R.B. Amin, President of Federation of Indian Chambers of Commerce and Industry, did admit recently that we have got used to assured sales; as a result sensitivity regarding costs as well as a provision of prompt and polite service to the consumer has grown lesser and exhorted the businessmen to cut their costs by increasing production.<sup>8</sup> The Mahatab Committee appointed by the Government has also vividly brought out the various causes responsible for increase in production costs of steel.<sup>9</sup> What is more surprising is that the public sector industries do not possess even comparative data of the cost of production in other countries of the world.

It may be argued that new industries are in the gestation period and will be able to reduce their costs in course of time. But how can the demand of the old established industry like cotton for providing suitable incentive for export promotion even after the devaluation of the rupee be justified?<sup>10</sup>

A word here may not be out of place about the role of private foreign capital in the development of our economy. There has not been any significant net inflow of foreign capital in the post-Independence period. The foreign capital coming into the country has tended to take advantage of protected home market in collaboration with its Indian counterpart and has not been helpful in promoting our exports to foreign countries.

In fine, it may be said that the Government has failed to conceive and implement its licensing policy on right lines and enforce necessary discipline in the home industry for cost reduction. In contrast to this, the U.K. Government has exercised very effective and substantial control in industry during the post-war period and has forced the pace of modernisation, as a result of which industry has become efficient and is able to compete in the world markets.

It appears that there has not yet emerged in the country a class of innovating and initiating entrepreneurs orientated not towards larger profit margins at existing level of output and technique but towards expanded output under a regime of regular technological change.<sup>11</sup> Protection has not induced in our businessmen a greater sense of awareness and responsibility to the nation. They have not fully utilised their fortunes (accumulated as a result of protective umbrella provided by the Government) in developing more industries and have indulged in conspicuous consump-

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8. *Economic Times*, 13th July, 1966.

9. *Ibid.*, 10th July, 1966.

10. *Ibid.*, 13th July, 1966.

11. Rostow: *op cit.*, p. 140

tion of imported luxuries and in several cases are responsible for misdirecting the valuable foreign exchange resources. The U.S. Business Mission, also gathered the impression that there is a tendency in Indian businessmen to become lax and careless about cost consciousness.<sup>12</sup> Business community has lost its self-reliance and is tending to depend more and more on Government help. There is severe criticism of Government policies without any corresponding realisation of its social responsibility. There is too much praise for non-interference policy of U.S. Government and too little awareness of the feelings of social responsibilities which American business has.<sup>13</sup>

### Technological Backwardness

Our technological backwardness has also proved an inhibitory factor and has retarded progress. Though our country has a large labour force, but highly efficient and skilled labour is difficult to obtain. As a result, there is a great disparity between the wages of skilled and unskilled labour, which probably does not obtain in any industrially advanced nation of the world. Most of our newly-started plants have been planned and designed with the help of imported skills. The story of old industries is no better; cotton textile industry does not stand in a favourable comparison, from the technical angle, with the textile industries of the other countries of the world; the Tatas were unable to plan and execute their steel expansion programmes with the help of their own technical personnel. Top managerial skill for running giant undertakings is also not available in the country.

Despite good profits in the industrial sector industry has not paid sufficient attention to conduct research for improving the quality and reducing the cost of production.<sup>14</sup> A number of Central Research Laboratories started by the Central Government have also failed to, make any significant impact. Professor P.C. Mahalanobis was, therefore, constrained to point out the poor contribution that Indian research and development had made to the national economy and was distressed to see the kind of window-dressing flourishing in the realm of research and development.<sup>15</sup> Research workers in the field of science and technology have yet to meet the challenge of adequately developing national resources and of economy in the use of imported resources.

Like our industrialists, the Government has also failed to make proper utilisation of resources at its disposal. Its investment policy has not always

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12. *Commerce*, 12th June, 1965, 'Impressions of U.S. Investment Mission'.

13. *Commerce*, 29th May, 1965, 'American Letter'.

14. *Economic Times*, 13th July, 1966. 'Incentives of Industries for Research and Development' by J.W.L. Russel.

15. *Economic Times*, 17th June, 1966.

been guided by rational considerations. As Vera Anstey has rightly observed that too much attention has been paid to grandiose schemes<sup>16</sup> involving heavy outlays when resources could be utilised in more productive schemes involving less import content. It has failed to plan its administrative expenditure properly. Administrative expenditure of the Central Government more than doubled to Rs. 110.00 crores between 1960-61 and 1966-67.

Unluckily, the hostile attitude of our neighbours has also proved a stumbling block in the path of our progress. Right from the beginning dispute over Kashmir has been draining our resources. Border dispute with China has also been a source of serious strains involving huge financial outlays on defence and correspondingly we had to curtail our development expenditure. Defence expenditure (Revenue as well as Capital) which stood at Rs. 281 crores in 1960-61 has jumped to Rs. 1,242 crores in 1971-72 (Budgeted amount).

After analysing the main causes of inadequate progress it may be of interest to find whether there has been any significant change in the living standards of Indian masses since the beginning of the First World War.

The question of judging the improvement in the standard of living is not an easy one because comprehensive comparative data are not available. But certain facts lead us to the conclusion that there has not been any appreciable change during the last 50 years. The per capita annual consumption of foodgrains during the years 1893-94 to 1895-96 was 587 lbs. per annum and since then there has been continuous deterioration and during the years 1936-37 to 1945-46 it came down to 399 lbs. per annum.<sup>17</sup> Partition of the country further adversely affected food supplies. After independence, there has been some improvement and per capita daily consumption of cereals and pulses has risen to 438 grammes in 1968-69 as against 394 grammes in 1959-60.<sup>18</sup> But the per capita availability is still short of the minimum required by 300 calories per day. As regards cloth, per capita consumption amounted to 16 yards per annum at the beginning of the First World War which remains more or less the same even now.

Per capita availability of essential items like cereals, edible oils, sugar and cloth has not shown any increase since 1961 but rather declined in some cases. The greater use of some consumer durables like bicycles, watches, radio sets, sewing machines and a few more better agricultural implements in the villages should not be taken to mean that the living standards of the masses on the whole have improved. It simply means that certain sec-

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16. *Capital*, December 22, 1960, 'India's Take-off Problem' by Vera Anstey.

17. Estimates of Blyn quoted by Daniels Thorner in *Land and Labour in India*.

18. *Eastern Economist*, Annual Number, 1971.

tions of the population have much better command of the resources.

We may, therefore, conclude that the economy is no longer static and has begun to move forward, though the pace of progress has been slow both in absolute and comparative terms. The benefit has been monopolised by a small minority and has not percolated to the masses.

### Future Strategy

In view of the fact that our planning strategy in the past has failed to generate the desired rate of growth and enthusiasm in the people, it is incumbent on the planners to do some heart-searching and try to present before the nation a realistic plan based on indigenous resources both human and material. The recent devaluation of the rupee occasioned by our failure to increase production and restrain consumption has imparted added urgency to the task of giving a new turn to our planning strategy. A lot of discussion is going on in the press and among the political parties regarding the future planning. There is almost complete agreement for achieving a much higher growth rate and reducing the ever-widening gap between the 'haves' and 'have-nots'. However, there is no agreement on the approach to be adopted for achieving the desired goal. Anyway, this is the time to learn from our past mistakes and chart a course of action which may bring happiness and prosperity to all. There is yet imperfect realisation of the discipline that is necessary to put the nation's economy on a sound footing.

The aim of future planning should be to ensure an increasing income, more employment opportunities by better utilisation of our resources. The increasing incomes in the initial stages of development have to be ploughed back and not frittered away on increased consumption. We should not simply plan for producing what is necessary but should also look into the feasibility aspect, i.e., whether we have got the necessary competence to produce such items at reasonable costs and whether such resources cannot be applied elsewhere in a much more productive manner. In the face of acute scarcity of resources, it is of utmost importance to get maximum benefit out of them. For example, we have spent crores of rupees on several irrigation projects which have yielded very little benefit while the same amount could be better utilised in minor irrigation schemes. Similarly supply of electricity to irrigation and small industries is more productive than to heavy industry like aluminium. But more often than not, the Government has favoured the big industrialist vis-a-vis the farmer and small industrialist in supplying electricity. Excess capacity in jute industry and other industries is again a pointer to the mis-direction of resources.

There is need in our country to properly integrate and coordinate developments in various sectors of the economy so that each sector may

strengthen the other. In the absence of a well-balanced expansion of the various sectors of the economy, overall growth rate cannot be as high as it ought to be. That in the past we have failed to achieve the needed balance has become obvious and calls for no detailed discussion.

### Agriculture

It is no accident that all countries which succeeded in developing manufacturing industries possessed a highly efficient and commercialised agriculture<sup>19</sup> and even in England the so-called agricultural revolution preceded the industrial revolution.<sup>20</sup> We have therefore to plan for achieving higher productivity in agriculture which is one of the lowest in the world. The potentialities of known technology capable of raising the productivity in agriculture must be brought to bear upon purposefully and rapidly than has hitherto been the case. Tricks of agricultural productivity are highly productive and prompt in their effect.<sup>21</sup> Well known techniques are to be adopted to the local conditions and their knowledge is to be diffused among millions of peasant farmers. Not only the mental outlook of the farmers need be changed but also the supply of key inputs like fertilisers, pesticides, seeds, etc., should be sufficient to effect the needed change in the productivity. It is well known that we failed to plan for adequate supplies of these key inputs and the supplies fell short even at the existing level of demand. It would be unrealistic to assume that an illiterate and impoverished peasant will increasingly use these inputs if adequate finance and incentives are not provided. He is to be assured reasonable price for his produce and provided compensation and subsidies for adopting improved agricultural practices. The supply of adequate finance (both for long and short-term requirements) at right time and right place is essential for facilitating agricultural operations. Not only that, the task of organising, training and motivating millions of farmers is no doubt a stupendous one and will require an efficient and sympathetic administrative organisation. The whole success of our planning efforts depends on our ability in achieving higher productivity in agriculture. By increasing production in agriculture, not only shall we be able to dispense with the imported supplies of foodgrains but increase our exports for meeting the ever-growing bill in respect of machinery and raw materials. It is obvious that in the near future the country can hope to achieve higher exports only in agriculture or agricultural processed goods. It is also clear that U.S.A. is no longer going to supply food on soft terms and is asking for the payment of food imports in dollars.

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19. Kaldor, *op. cit.*, p. 241.

20. *Ibid.*, p. 240.

21. Rostow: *op. cit.*, p. 143.

### Animal Husbandry

Animal husbandry forms an integral part of diversified agriculture and can be a good source of supplementary earnings to millions of people in the countryside. Up till now the development of animal husbandry has received scant attention at the hands of the planners and its potentialities have not yet been fully realised. The prosperity of a number of countries like Netherlands, Denmark,, New Zealand, Australia, etc., is dependent upon the flourishing dairying industry.

The dairying industry is very labour intensive and can give employment to a large number of people in the countryside, specially in U.P., Punjab, Rajasthan and Gujarat, and does not involve complicated training of the farmers. Though our country boasts of a large number of cattle population, the milk yield of cows, buffaloes and goats remains one of the lowest in the world. The per capita consumption of milk has not shown any increase during the plan period.<sup>22</sup> We can very usefully learn from countries like Netherlands and Denmark where the milk yields are one of the highest in the world. It is surprising that our country is unable to utilise the oil-cake which is a good cattle feed and increasing exports are being made to European countries.

Alongside of the development of dairying, poultry farming offers tremendous scope as the demand for eggs is increasing at a rapid rate and has already outstripped the supply. The modern techniques of this occupation have, however, yet to be learnt and a few farms started on modern lines have shown good performance. Similarly sheep raising in some parts of the country has also good potentialities. Our country has a large population of sheep but wool yields are quite low. Average wool yield from a sheep is 2 lbs. which can easily be raised to 6 lbs. New breeds of sheep are to be developed for improving the quality as well as the yield of the wool. We can, thus, dispense with the imports of finer varieties of wool.

Development of pisciculture specially maritime fishing is also full of potentialities. Our country possesses more than 3,000 miles of coastal line but the quantity of fish caught is quite small. Though the production of fish has increased from 7.5 lakh tons to 13 lakh tons between 1951 and 1964 but the growth in the production is 50 per cent below the world average and India's contribution to world production has gone down from

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22. A number of modern dairies have been set up in some parts of the country but their number is too small and many of them simply concern themselves with the collection of milk and have made little effort to improve yields in the milk collection areas. It is only in Kaira district that cooperative dairies have made real impact on milk yields. Commendable efforts are also being made by Hindustan Lever to develop milk yields in the surrounding regions of the Etah district (U.P.). A real break-through in milk yields has not yet come.

3.7 per cent in 1951 to 2.7 per cent in 1957-63 period. The occupation is in the hands of ignorant and poor fishermen who generally catch fish in shallow water in the adjacent coastal areas. Mechanisation of crafts, development of preservation and canning facilities along with the establishment of fishing harbours can go a long way in increasing fish production. Experts believe that deep water fishing specially on the west coast is full of great potentialities and exploration of new fishing areas on the sea should be taken up immediately.

### Forestry

More than 1/5th of area is covered under forests but forests contribute only a very small fraction to our national income. Development has failed to keep pace with other sectors of the economy. Production of timber and firewood which amounted to 15.8 million cubic feet in 1950-51, increased to about 20 million cubic feet in 1969-70. There is reckless exploitation of forests and no efforts have yet been made to conserve and develop forest wealth of the country. Our forests are unable to supply raw materials to paper and rayon industries which are still of small dimension. There is crying need for increasing the supply of cellulosic materials for paper and rayon industries which is not being fully met from indigenous resources. Rubber and cashewnut plantations can also add to our income. A number of minor forest products like gums and resins, medicinal herbs, etc., can also add substantially to our income. There is need for undertaking research on a massive scale to find out the fast growing varieties of wood suitable for industries like paper, rayon, plywood and match and finding out how forest resources can be fully utilised. Forest roads should also be developed to make such areas accessible. Forests may also be leased under suitable conditions to private planters for development. Investments in forestry needs must be considerably stepped up.

### Industries

Industrialisation should aim at increasing the total production in the country and make the best possible use of existing resources of the country. More specifically, it should enable greater productivity in agriculture by supplying the key inputs and at the same time assuring better markets for agricultural produce. Industry should siphon the surplus population from agriculture which has proved a serious drag on agricultural productivity as has been done in several East European countries like Hungary, Yugoslavia, Bulgaria, etc. At the same time, care should be taken to avoid concentration of population in big cities and ensure that the benefit of industrialisation should accrue to the masses and not be the monopoly of a small minority.<sup>23</sup> We have to avoid the existence of a 'dual economy'

23. Ontiri gave a very fine exposition of the aims of industrialisation at Poona Seminar on Paths to Economic Growth held in January, 1961.



involving two patterns of life existing side by side so that the social tensions arising from it may not disrupt our way of life. For this purpose more emphasis is required to be placed on the development of small-scale industries.

Our economy is short of capital and has abundant human resources unlike the Western countries. It is therefore clear that mere emulation of the current practices of the Western countries cannot bring salvation. There is therefore need for some fresh thinking regarding the type of industrialisation we need and the techniques to be adopted.

Schumacher has pleaded for the adoption of intermediate technology<sup>24</sup> for the developing countries and his ideas deserve serious consideration at the hands of the planners. This intermediate technology would be vastly superior in productivity to the traditional technology (in its present state of decay) while at the same time cheaper and simpler than the highly sophisticated and enormously capital intensive technology of the West. It would also have a better demonstration effect and lead to accelerated development. The work should be provided to people in areas where they are living who should mainly produce from local materials for local use and adopt production methods which are relatively simple and at the same time more efficient. Such production methods can be discovered through proper research. Our scientists and technologists have to meet the challenge and prove their worth by devising equipment and implements which are simple, efficient and labour intensive. We can also have very good export demand for them because most of the developing countries are passing through a similar situation, i.e., they have shortage of capital and surplus man-power.

It does not however mean that there is no place for large-scale industries employing advanced techniques. They have to be properly integrated and coordinated in the industrial pattern of the country. They should preferably be restricted to those areas where small-scale industries cannot be expected to work efficiently in view of the fact that they make demands of highly qualified man-power and more capital which is not available to the desired extent. Defence industries, transport and electric generation machinery, etc., are more suitable fields for this purpose. Industries for the manufacture of tractors, trucks, cars are capable of playing double role according to the needs of peace and war with minor adjustments.

Another point worth discussing is whether there should be any control or regulation over industries specially in view of the fact that a lot of propaganda is being carried on in the press for relaxing controls which are said to be very rigid. Our analysis of the development of industries has clearly brought out the need for Government control for making effective

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24. This paragraph is based on article—'Industrialisation through Intermediate Technology' by E.F. Schumacher,

use of limited capital and promoting greater efficiency in the industry. Only by exercising proper control can we bring about coordination between the large-scale and small industry. There is also need for increasing efficiency in our industry which is showing continuous decline on account of the sheltered market which has been provided by the Government. For this purpose industry-wise statutory boards should be created which should be vested with vast powers. Industries producing unessential items should be completely prohibited whether they depend on imported or indigenous raw materials. Licensing authority should also see whether the licensed unit would be capable of producing goods at competitive prices and whether it is of optimum size and located at a suitable place. Otherwise there is danger that unsound industrial units may come up and demand protection from the Government against foreign competition on false national consideration. Such industrial units will become a burden on the nation. Synthetic rubber plant at Bareilly may be cited as an example. Import substitution should not be allowed to go too far as after all closed economy is not our aim.

There is, therefore, need for exercising much greater control on industries than has existed so far. Even industries in England and other Western countries are under much greater control of the Government than in our country. But there should be no place for red-tapism and once the industries are allowed to be established they should be provided all possible facilities and earn reasonable profits. Our businessmen had got to be accustomed to a certain amount of discipline when they expect lot of favour from the Government. After all they cannot have best of both the worlds.

### **International Cooperation and Foreign Trade**

There is much realisation of the need, in industrially advanced countries of the world, of actively assisting the developing countries in promoting economic growth. However, the magnitude of the efforts is yet small. United Nations Secretary-General had appealed to the advanced countries to devote 1 per cent of their national incomes in giving aid to the developing nations. But the amount of aid forthcoming is much less than this. Besides, these countries are putting several restrictions in allowing the imports from developing countries, with the result that most of them are facing balance of payment crisis which has seriously retarded their development.

Coming to India, our country should devote special efforts in reducing the amount of imports specially by reducing the quantum of imports of foodgrains, unessential machinery and raw materials. The country can definitely afford to do without air conditioners, refrigerators, fine cloth and other luxury goods based on imported raw materials. On the other hand,

special efforts are necessary to produce those items whose demand exhibits good potentiality in foreign countries. The Government and the people have to cooperate in promoting more exports if we want to achieve rapid growth.

### Government Policies and Planning

There is need for a fundamental change in fiscal and planning policies of the Government. The Government has so far tried to develop industries which require massive capital investment, and dependent on imported skill. They have failed to give returns commensurate with the investment. Furthermore, Government failed in making adjustment between the resources needed and raised and resorted to deficit financing for bridging the gap.<sup>25</sup> During the Third Plan period money supply increased by 57 per cent as against a rise of 15 per cent in national income. The amount of deficit financing raised the level of prices and made it necessary for the Government to devalue the rupee. Rise in the level of prices has brought great misery to the fixed income groups and affected redistribution of wealth in favour of industrialists and big businessmen. Morarji Desai in his note to the Congress Working Committee has rightly demanded of the Government to give a solemn undertaking that there would be no deficit financing in next five years even for development purposes. Central and State Governments should plan for surplus budgets in the coming years. His 16-point plan for boosting the national economy deserves serious considerations at the hands of the planners.<sup>26</sup> Government should effect economy in the revenue expenditure and utilise the resources in such projects which can give more profit to the Government and at the same time are helpful in stimulating the economy.

Government should also help to tone up its administration to meet the new tasks. The failure of many a good scheme has been due to defective implementation. Government has not been successful in bringing all the tax evaders to book and lot of unaccounted money is circulating in the market, much to the detriment of the economy.

### Educational System

Our educational system also needs to be reoriented to the requirement of modern technology and industrialisation.<sup>27</sup> Our technological backwardness has been an important contributory factor in retarding the

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25. *Vide* statement of J.R.D. Tata attached to the Public Accounts of Tata Iron and Steel Company reported in *Hindustan Times*, dated 14th July, 1966.

26. *Hindustan Times*, dated 6th July, 1966.

27. Mukherjee, R.K.: Preface in the *Economic History of India 1857-1956*, edited by B.V. Singh.

pace of progress. There is a prime need to get away from an over-emphasis on liberal education which represents a misuse of high quality human resources,<sup>28</sup> as they can be more gainfully diverted in accelerating the process of industrialisation. A U.N. Committee has rightly observed that developing countries should choose the most efficient ways to impart scarce skills and important consideration should be the minimum level of education needed before a person can learn to perform effectively the duties of an occupation.<sup>29</sup>

### Population Planning

Last but not least is the importance of checking rapid growth in the population. We shall have to spread the family planning consciousness in rural areas and take steps so as to limit the future growth to 1 per cent per annum. Failure in this direction may seriously affect our ability to raise the living standards of our people.

In the ultimate analysis, the problem of economic development is a human problem. Greatly accelerated development can be achieved only by changing human attitudes to risk taking and profit making. People should be actuated by a desire to expand and experiment and be anxious to overcome physical limitations of capacity or labour. They should inculcate attitude of austerity by restraining their consumption to the barest minimum. Agitations and morchas on the part of the people and tall talk and false hopes on the part of the Government can no longer bring prosperity to the nation which can be achieved by hard and intelligent work. New leadership in the field of business, science and technology capable of innovation and adaptation commanding the confidence of the masses can alone deliver the goods. The nation has got to be attuned to the task of achieving economic growth and real problem that faces the nation is of how to motivate<sup>30</sup> people for accomplishing higher tasks and create in them a feeling of self-confidence and independence. The tendency of the people to depend too much on Government reflects the lack of confidence and does not breed optimism for the future. Let us sink our differences, close our ranks and cooperate together in the onward march of the nation and shoulder the difficulties cheerfully that may crop up from time to time.

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28. *Economic Times*, dated 11th July, 1966—Vide statement of Nawal Tata.

29. U.N. Economic and Social Council: Committee for Industrial Development—6th Session, 1966.

30. Experts believe that achievement-oriented ideology is absolutely essential to economic development. This ideology should be spread not only in business and Government circles but also throughout the nation. A very useful discussion of this aspect is given in the book, *The Achieving Society*, written by David C. McClelland.

## POST-SCRIPT

The study was completed at the fag end of the Third Plan. The year 1964-65 was a year of peak agricultural production, and the index reached an all time high of 159.4. Industrial production was also running at satisfactory rate. Immediately thereafter the economic situation showed signs of stresses and strains. Agriculture production in the year following 1965-66 slrank to 133.1 mainly because of the adverse weather conditions, and the country had to face acute shortage of food. The famine could be kept at bay by massive imports of foodgrains, and the imports in 1966 amounted to more than 10 million tonnes—a record in the imports of foodgrains. The effects of adverse agricultural conditions were reflected back on our industrial production, and exports. There was sharp reduction in the production of agro-based industries which could not be compensated by the production of other industries. Growth in industrial production was halted and there was marginal decline in the production in 1966 and 1967. The situation was indeed desperate. At such a time came the Indo-Pak War which proved a further snag in a situation which was even otherwise none-too-comfortable. On the top of it, friendly countries suspended our foreign aid, and restored it only on our agreeing to their viewpoint. Rupee was devalued in June 1966 but even this step failed to narrow the gap between our imports and exports and adverse balance of trade further increased.

In such a critical situation, Government had to curtail the amount of public investment. Shortage in agricultural production, and industrial recession brought down the planning process to a standstill. Fourth Plan could not be commenced immediately after Third Plan. The semblance of planning was just kept as a face saving device by the preparation of 3 annual plans in between Third and the Fourth Plan.

At a time when we were passing through such critical times, there was a great upsurge in our agricultural production which revitalised the entire economy of the country. It was not simply the favourable Monsoon but the introduction of new hybrid seeds in wheat, maize, and millets. These new seeds worked wonders, and there was immediate upswing in production. It should, however, be said to the credit of the Government, that it was more liberal in providing the necessary inputs, imported or otherwise, which helped in imitating the new strategy of agricultural

development. So great was the effect on production that people have begun to talk of 'green revolution' in the country. In areas like Punjab and Haryana, where the cultivators have embraced the new technology in a great measure wheat production has been more than doubled in a couple of years. Even in the country as a whole wheat production has been doubled in 4 years (1965-66 to 1969-70). As a result of the success of new technology, the growth rate in agriculture during the first 2 years of the Fourth Plan has been about 6 per cent, and is according to the best expectation of the planners. With the success of the new technology, the demand for farm machinery has increased tremendously—and consumption of chemical fertilisers is also increasing at a rapid pace. The need of the hour is the diffusion of the new technology to wider areas. There is also need to develop higher-yielding strains of seeds for major cash crops, including cotton, jute and oilseeds and also pulses—as the production of these crops is not rising at a fast rate. Shortage of cotton during the year 1970-71 has affected adversely the production of cotton cloth and necessitated the huge imports of cotton. The problems of dry areas have not been properly attended to so far and a breakthrough in rice production is yet to be achieved. Research scientists in agriculture have to meet the challenge boldly and the organisational effort of the Government should prove equal to the gravity of the task involved.

Demand of industrial goods arising from the adoption of new technology has been very considerable. Special mention may be made of fertilisers whose production has shown about four-fold increase. Since the end of the Third Plan and with the commissioning of the contemplated schemes the production will increase further. Government has been more conscious in executing the plan involving higher production of fertilisers. There is still acute shortage of tractors in the country.

On the industrial front, recession was lifted by 1967, as production in 1968 and 1969 rose by 6.4 and 7.1 per cent respectively. The significant rise in agricultural output during 1967-68 was followed by a general improvement in the rate of growth of consumer goods industries, and later of intermediate goods and capital goods sectors. In particular, the output of electric machinery, rubber products, petroleum, chemicals, cement, paper, food manufacturing industries has shown satisfactory increase since 1967. Textile industries have rather stagnated. Production in jute declined considerably in 1968 and 1969 but the latest picture in this industry is one of subdued optimism because of the severe dislocation of jute exports from Bangla Desh on account of their freedom struggle. Shortage of steel on account of industrial unrest and defective organisation has affected seriously the output of engineering industries. The country which was exporting steel some years back has turned a

big importer on account of the growing internal demand. Declining demand of railway equipment has led to shrinkage in the production of transport equipment. The problem of under-utilisation of capacity is not so serious now except in case of steel, heavy engineering, transport equipment, cotton, and a few engineering industries. In case of steel and heavy engineering, it is not the demand but the organisational deficiencies that have held up the progress while the shortage of raw material is responsible for cotton and engineering industries of late, the profitability and demand have considerably improved. But the progress is much below the rate envisaged in the Fourth Plan, and is a matter of great concern. There are, however, indications that the growth rate will pick up since a large number of licenses and letters of intent have been issued in 1969 and 1970. It may, however, be stated in passing that problem of promoting industrial development in backward regions has not attracted the desired attention. The problem of generating adequate employment in non-farm sector is a still vexed question, and cannot be solved if the planning is to continue on the existing pattern.

The recent developments in foreign trade are more assuring inasmuch as the adverse balance of trade has been considerably reduced. What is more satisfying is that our exports are rising in consonance with Fourth Plan targets, and in 1970-71 rise has been of the order of more than 8 per cent as against 7 per cent envisaged in the Plan. It is, however, imperative to strengthening our export effort by taking special measures to encourage larger volume and varieties of goods whose demand is expanding in foreign markets. Our imports are likely to increase during the coming years because of the revival of industrial activity in the country. In the ultimate analysis, growth in exports can result from the healthy and efficient growth of the economy.

To increase hold over investible resources for channelising the flow of credit into priority sector, Government nationalised 14 major banks sometime back, and recently general insurance business has also been taken over. Weaker sections of the society have derived some benefit but much more remains to be done, and restructuring the organisational set up is necessary. As regards setting up of new undertakings, and nationalisation of existing industries, Government policy has not been prompted by the desire to earn easy profits. Similarly, the private sector has not been denied the possibility of high profits which it can earn in some industries. The performance of the public sector has been showing improvement but the massive investments made in steel, heavy machines, mining, and drugs and pharmaceuticals have not borne fruit. The management of these big undertakings has not proved equal to the task, and failure in most cases has been due to organisational deficiencies and labour unrest. It would be better to scrap some of the plants if

they are not expected to prove viable in the course of a few years. Pricing policies should also be realistic to ensure reasonable profit to the public exchequer. Returns from public undertakings have not been commensurate with the investment made.

In fine, the condition of our economy is much better than what it was towards the close of the Third Plan. Production is rising, and the balance of trade gap has been considerably narrowed. There has been more than 5 per cent increase in the National Product during the first 2 years of the Plan, and this rate of growth is higher than achieved in previous plans. There has, however, been little increase in the per capita income, and the benefit of planning has accrued to a small section of the society, whereas the standard of living of the masses has declined or at best remained stagnant. Naturally, they feel frustrated. The routing of right reactionary parties in the recent elections to Lok Sabha is a clear pointer of the mood of the masses. The massive mandate given by the people to Indra Government is in the hope that she would try to initiate policies that would be more beneficial to the masses, and disparities in income would be considerably narrowed. It is yet to be proved whether her Government proves bold enough to resist the pressure of vested interests. One thing, however, is clear that planning on the existing pattern can not change the situation. Judged in this light, the provision of Rs. 50 crores for providing employment in rural areas and Rs. 25 crores for educated unemployment is only a piecemeal measure.

The gap between industrialised and less developing countries is widening and a developing country like India has to grow more rapidly. But the progress achieved has belied this expectation on which we formulated. Time has come to give a second thought for adopting a new strategy of development.



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## APPENDIX I

(Chapter V)

### DEBT LEGISLATION (1933—1946)

ASSAM :	—The Assam Money-lenders Act, 1934.
BIHAR :	—The Bihar Money-lenders Act, 1938. The Bihar Money-lenders (Regulation of Transactions) Act, 1939.
BOMBAY :	—The Bombay Money-lenders Act, 1946.
MADHYA PRADESH :	—The Madhya Pradesh Money-lenders Act, 1934. The C.P. & Berar Protection of Debtors Act, 1937.
MADRAS :	—The Usurious Loans (Madras Amendment Act, 1936). The Madras Debtors Protection Act, 1934. The Madras Pawnbrokers Act, 1943.
ORISSA :	—The Orissa Money-lenders Act, 1939.
PUNJAB :	—The Punjab Regulation of Accounts Act, 1930. The Punjab Debtors Protection Act, 1936. The Punjab Registration of Money-lenders Act, 1938.
UTTAR PRADESH :	—The U.P. Debt Redemption Act, 1940. The U.P. Regulation of Agricultural Credit Act, 1940.
WEST BENGAL :	—The West Bengal Money-lenders Act, 1940.
HYDERABAD :	—The Hyderabad Money-lenders Act, 1349 F.
MYSORE :	—The Mysore Money-lenders Act, 1939.
TRAVANCORE COCHIN :	—The Cochin Usurious Loans Act, 1936.

## APPENDIX 2

(Chapter V)

### MAXIMUM RATES OF INTEREST ALLOWED UNDER DIFFERENT ACTS

State	Relevant Act	Simple Interest per cent per annum		Compound Interest per cent per annum
		Secured Loans	Unsecured Loans	
ASSAM :	The Assam Money-lenders Amendment Act, 1943 (Section-4) (Section-8 of the Main Act).	9-3/8	12½	Prohibited
BIHAR :	The Bihar Money-lenders Act (Section 9 & 10).	9	12	Prohibited
BOMBAY :	The Bombay Money-lenders Act (Section 25).	9	12	—
MADHYA PRADESH :	Usurious Loans Act, 1918.	12	18	10
MADRAS :	The Madras Agriculturists Act, 1933 (Section 13).	6½	6½	—
ORISSA :	The Orissa Money-lenders Act (Section 9).	9	12	—
UTTAR PRADESH :	The United Province Debt Redemption Act [Section 9(2)].	4½	6	—
PUNJAB :	The Punjab Relief of Indebtedness Amendment Act, 1940.	7½ or 2% above the Bank rate whichever is higher.	12½	—
WEST BENGAL :	The Bengal Money-lenders Act, 1940 (Section 30).	8	10	—

SOURCE : *Agricultural Legislation in India*, Volume 1 (1956), Regulation of Money-lending—Page vii.

### APPENDIX 3

(Chapter VI)

#### PRODUCTION OF PRINCIPAL CROPS IN UNDIVIDED INDIA

Columns 2, 3, 4, 5—Quantity : Million tonnes.

Column—6—Million lbs.

Columns 7 and 8—Million bales.

<i>Year</i>	<i>Rice</i>	<i>Wheat</i>	<i>Sugar- cane</i>	<i>Oil- seeds*</i>	<i>Tea</i>	<i>Cotton</i>	<i>Jute</i>	<i>Index of agricul- tural product 1938-39=100</i>
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>
1913-14	27.5	8.5	2.5	2.1	307	5.6	8.9	95.6
1914-15	25.7	10.2	2.6	2.5	313	5.7	10.5	103.9
1915-16	31.4	8.7	2.8	2.4	373	4.1	7.3	108.1
1916-17	33.2	10.4	2.9	3.7	370	4.9	8.3	115.9
1917-18	33.7	10.1	3.6	3.4	371	4.4	8.9	115.3
1918-19	22.2	7.6	2.6	2.0	380	4.3	7.0	82.7
1919-20	30.6	10.2	3.2	3.1	377	6.3	8.5	112.3
1920-21	25.5	6.8	2.6	2.6	345	4.3	5.9	94.4
1921-22	30.2	10.0	2.7	4.0	274	5.3	4.0	105.7
1922-23	31.1	10.2	3.2	3.5	312	6.0	5.4	110.5
1923-24	26.0	9.9	3.5	3.3	375	6.1	8.4	102.1
1924-25	27.8	9.0	2.7	3.7	375	7.2	8.1	104.1
1925-26	27.8	8.9	3.1	3.7	364	7.4	8.9	101.7
1926-27	26.5	9.1	3.4	3.7	393	5.9	12.1	102.2
1927-28	25.2	7.9	3.3	4.4	391	7.1	10.2	99.9
1928-29	29.2	8.7	2.8	4.8	404	6.9	9.9	103.7
1929-30	28.2	10.7	2.8	4.6	433	6.2	10.3	105.7
1930-31	28.9	9.5	3.3	4.7	391	6.2	11.2	107.7
1931-32	30.5	9.2	4.1	4.4	394	4.9	5.5	108.2
1932-33	28.0	9.6	4.9	5.2	434	5.4	7.1	107.8
1933-34	27.5	9.5	5.1	5.4	384	6.0	8.0	107.2
1934-35	27.2	9.9	5.4	3.7	399	5.7	8.5	106.3
1935-36	24.4	9.6	6.1	4.2	394	7.1	7.2	105.7
1936-37	29.6	10.0	6.7	4.9	395	7.4	9.6	116.2
1937-38	28.5	10.9	5.6	5.8	430	6.9	8.7	111.9
1938-39	25.8	10.1	3.5	5.4	452	6.1	6.8	100.0
1939-40	27.1	11.0	4.8	5.5	453	5.9	9.7	108.1
1940-41	23.6	10.2	6.0	5.9	464	7.3	13.2	110.6
1941-42	26.7	10.2	4.6	4.6	501	7.5	5.5	106.0
1942-43	26.2	11.3	5.3	4.9	564	5.6	9.0	111.5
1943-44	32.4	9.9	6.4	5.8	556	5.9	7.0	118.8
1944-45	29.9	10.8	6.0	5.9	511	4.0	6.2	114.2
1945-46	28.4	9.2	5.8	5.4	575	4.0	7.8	107.9
1946-47	29.3	8.5	6.1	5.4	606	4.1	5.4	106.2

\*Oilseeds comprise linseed and mustard seed, sesamum and groundnut. But groundnut production is included from 1916-17 onwards.

SOURCE : Papers on National Income, Vol. I, pages 240-245.

## APPENDIX 4

### Chapter VII

#### INDUSTRIES CLASSIFIED INTO DIFFERENT CATEGORIES IN TERMS OF THE 1948 AND 1956 RESOLUTIONS WITH REFERENCE TO THE ROLE OF THE STATE IN RELATION TO THE SAME

1956 Resolution		1948 Resolution
	1. Arms and ammunitions and allied items of defence equipment.	Exclusive state monopolies of Central Govt.
	2. Atomic Energy.	
	3. Railway transport.	Nationalised in 1950. Subjected to state regulation.
	4. Air transport.	
	5. Generation and distribution of electricity.	Category two exclusive state responsibility to initiate and establish new units.
	6. Iron and steel.	
	7. Aircraft manufacture.	
	8. Ship building	
	9. Coal and lignite.	Category third industries included in the third category were normally open for private enterprise. But they were to be regulated under the Industries (Development and Regulation) Act, 1951 and as amended in 1954,
	10. Telephones and telephone cables, telegraph and wireless apparatus	
	11. Mineral oils.	
	12. Heavy castings and forgings of iron and steel.	
Schedule—A Exclusive State Responsibility to initiate and establish new units.	13. Heavy Plant and machinery required for iron and steel production, for mining, for machine tool manufacturing and for such other basic industries may be specified by the Central Government.	
	14. Heavy electrical plants including large hydraulic steam turbines.	
	15. Mining of iron ores, chrome ore, manganese ore, gypsum, sulphur gold and diamond.	
	16. Mining and processing of copper, lead, zinc, tin, Molybdenum and Wolfram.	
	17. Minerals specified in the schedule to the Atomic Energy—Order 1953.	
Schedule—B State will increasingly establish new units in these industries. Private Enterprise will also have opportunity.	18. All other minerals except 'minor minerals' as defined in section 3 of the Minerals Concession Rules 1949.	
	19. Aluminium and other not included in Schedule—A.	
	20. Machine Tools.	
	21. Ferro alloys and tool steels.	
	22. Basic and intermediate products required by chemical industries.	
	23. Antibiotics and other essential drugs.	
	24. Fertilizers.	
	25. Synthetic rubber.	
	26. Carbonization of coal.	
	27. Chemical Pulp.	
	28. Road Transport.	
	29. Sea Transport.	

## APPENDIX 5

(Chapter VIII)

### AGRICULTURE PRODUCTION : AREA AND YIELD INDEX NUMBERS

[Base : 1949-50 to 1951-52 (Average) = 100]

Year†	Index Numbers of		Yield per hectare@
	Area*	Production*	
1	2	3	4
1950-51	100.0	100.0	100.0
1951-52	101.8	100.7	98.9
1952-53	105.6	107.1	101.4
1953-54	109.1	113.7	104.2
1954-55	112.2	118.7	105.8
1955-56	113.8	122.2	107.4
1956-57	114.6	121.8	106.3
1957-58	116.1	127.5	109.8
1958-59	117.7	129.6	110.1
1959-60	119.7	138.5	115.7
1960-61	121.2	142.4	117.5
1961-62	122.4	145.5	118.9
1962-63	123.4	145.9	118.2
1963-64	123.9	150.9	121.8
1964-65	123.3	148.6	120.5
1965-66	122.7	144.7	117.9
1966-67	123.5	145.2	117.6
1967-68	124.5	154.2	123.9
1968-69	126.9	167.3	131.8

†The agricultural year to July-June.

•Three Year Moving Averages.

@Derived from columns 2 and 3.

SOURCE : *Economic Survey 1970-71* p. 81.



**APPENDIX 6**  
(Chapter VIII)  
**AGRICULTURAL PRODUCTION OF PRINCIPAL CROPS\***

	1949-50	1950-51	1955-56	1960-61	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70
	2	3	4	5	6	7	8	9	01	11
<b>A. Foodgrains</b>										
(a) Cereals . . . . .	60.81	55.05	69.38	82.21	89.34	72.35	74.23	95.05	94.01	99.50
Rice . . . . .	50.74	45.83	57.65	69.45	76.92	62.40	65.88	82.95	83.59	87.81
Wheat . . . . .	25.16	22.11	28.73	34.64	39.29	50.59	30.42	37.61	39.76	40.43
Jowar . . . . .	6.75	6.83	8.87	11.00	1.26	10.39	11.39	16.54	18.65	20.09
Bajra . . . . .	6.96	6.25	6.73	9.81	9.68	7.58	9.22	10.05	9.80	9.72
Other cereals . . . . .	3.20	2.68	3.46	3.29	4.52	3.75	4.47	5.19	3.80	5.33
	8.68	7.96	9.86	10.71	11.17	10.09	10.36	13.56	11.58	12.24
(b) Pulses . . . . .	10.07	9.22	11.73	12.75	12.41	9.94	8.35	12.10	10.42	11.69
of which : . . . .										
Gram . . . . .	3.90	3.82	5.41	6.25	5.78	4.22	3.62	5.97	4.31	5.55
<b>B. Non-Foodgrains :</b>										
(a) Oilseeds** . . . . .	5.09	5.02	5.54	6.87	8.56	6.40	6.43	8.30	6.85	7.61
of which . . . . .										
Groundnut . . . . .	3.31	3.35	3.71	4.70	6.00	4.26	4.41	5.73	4.63	5.14
Rapeseed and mustard . . . . .	0.81	0.77	0.86	1.35	1.47	1.30	1.23	1.57	1.35	1.51
(b) Sugarcane (in terms of gur) . . . . .	6.20	7.05	7.43	11.40	12.48	12.77	9.50	9.79	12.83	13.44
(c) Cotton (lint) . . . . .	2.59	2.87	3.99	5.24	5.68	4.58	4.97	5.45	5.14	5.23
(d) Jute . . . . .	3.30	3.51	4.48	4.13	6.07	4.48	5.36	6.32	2.93	5.61
(e) Mesta . . . . .	0.67	0.67	1.17	1.13	1.60	1.30	1.22	1.27	0.91	1.14

\*Figures from 1949-50 to 1965-66 are adjusted estimates with 1965-66 fully revised estimates as base, those for 1966-67 and 1967-68 in the case of food grains and for 1966-67 to 1967-68 in the case of other forecast crops are partially revised estimates and those for 1968-1969 and 1969-70 in the case of foodgrains and for 1959-70 only in the case of other forecast crops are final estimates.

\*\*Includes groundnuts, rapeseed and mustard, sesamum, linseed and castorseed.  
 Note : Figures are in million tonnes except for Cotton (lint), Jute and Mesta which are in million bales. One bale is equal to 180 kgs.

SOURCE : *Economic Survey, 1970-71*, p. 83.

# APPENDIX 7

(Chapter X)

## INDEX NUMBERS OF INDUSTRIAL PRODUCTION BASE YEAR 1960=100

Items	1961	1965	1966	1967	1968	Sept. 1970 (Provisional)
I. <i>General Index</i>	109.2	153.8	152.6	151.4	161.1	180.2
II. <i>Basic Industries</i>	112.7	164.3	172.9	176.5	194.6	214.9
1. Mining and Quarrying	105.4	131.7	136.1	135.8	144.2	135.0
2. Heavy Inorganic Chemicals	121.4	213.8	227.8	243.2	270.2	303.8
3. Cement	105.1	134.8	141.0	143.9	152.3	163.4
4. Iron and Steel	121.0	185.3	193.6	177.7	185.4	187.8
5. Aluminium Manufactures	110.6	225.9	273.2	339.8	400.5	530.0
6. Electricity	116.3	190.9	207.8	230.7	266.6	337.9
III. <i>Capital Goods Industries</i>	118.0	244.2	210.1	205.3	210.3	208.7
7. Prime movers, boilers etc.	130.3	43.6	364.6	377.7	494.5	436.1
8. Industrial Machinery	111.0	153.6	135.8	125.6	149.6	104.9
9. Machinery Components	121.2	428.8	378.6	367.8	337.2	369.9
10. Electrical Cables	104.2	198.3	195.9	206.7	191.5	221.5
11. Railroad Equipment	126.2	259.2	181.9	142.8	130.7	72.3
12. Motor Vehicles	104.2	136.0	136.2	131.8	149.5	154.9
IV. <i>Intermediate Goods Industries</i>	105.8	140.1	136.7	139.7	148.2	163.2
13. Cotton spinning	108.4	120.9	117.3	116.7	124.1	128.5
14. Jute Manufactures	89.1	120.3	100.4	104.1	96.4	96.0
15. Manufacture of wood and cork	95.5	235.2	205.1	218.1	233.9	202.5
16. Synthetic fibres	116.2	174.0	181.4	207.3	230.4	182.3
17. Tyres and tubes	114.2	173.5	174.1	185.4	227.6	294.9
18. Dyestuff and dyes	102.7	141.8	161.7	164.8	181.1	229.1
19. Structural clay products	118.5	124.1	169.0	214.0	232.9	334.8
20. Fittings, fixtures and fastness	107.3	197.2	205.7	149.7	101.9	107.7
21. Petroleum Refinery Products	106.0	158.7	195.9	234.2	260.1	282.4
V. <i>Consumer Goods Industries</i>	106.6	127.5	131.3	125.7	131.9	156.4
(i) <i>Consumer Non-durable Goods Industries</i>	105.8	120.5	122.6	114.9	117.4	134.5
22. Flour Milling and grinding	100.7	127.6	185.2	131.6	125.4	224.4
23. Sugar factories and refineries	110.0	124.7	129.8	84.0	84.5	—
24. Hydrogenated oil	100.4	127.1	106.2	116.4	140.4	—
25. Tea	111.6	114.1	113.5	116.6	104.9	—

Items	1961	1965	1966	1967	1968	Sept. 1970 (Provisional)
26. Cigarettes	106.7	146.1	157.5	147.4	163.3	165.2
27. Cotton weaving	100.3	100.0	92.9	90.1	96.2	93.9
28. Paper and paper products	105.8	147.2	160.0	167.1	185.0	207.6
29. Drugs and pharmaceuticals	114.7	133.7	155.9	135.8	154.4	—
30. Matches	97.1	110.9	94.8	89.4	97.9	110.9
31. Glass and glass products	104.6	131.1	141.7	153.5	120.9	110.7
(ii) Consumer durable goods industries	110.8	166.5	179.4	185.6	212.4	277.7
32. Commercial office and house machines	128.4	137.6	151.8	147.2	145.9	140.8
33. Electrical appliances	108.2	152.5	145.8	154.5	170.5	204.5
34. Communication equipment	121.6	217.4	265.6	318.3	510.1	723.0
35. Bicycles and tricycles	99.9	146.6	155.4	162.3	182.7	1198.9

SOURCE : Reserve Bank of India Bulletin, March 1971.

### APPENDIX 8

(Chapter X)

#### PRODUCTION OF SELECTED INDUSTRIES

Industry 1	Unit 2	1950-51 3	1955-56 4	1960-61 5	1965-66 6	1969-70 7
1. Coal (Including lignite)	Million Tonnes	32.8	39.0	55.5	70.3	79.6
2. Steel ingots	"	1.47	1.73	3.42	6.53	6.43
3. Aluminium (Virgin Metal)	'000 Tonnes	4.0	7.4	18.3	62.1	135.1
4. Machine Tools	Millions Rupees	3.0	8.0	70.0	294.0	300.0
5. Cotton Textiles Machinery	"	N.A.	40.0	104.0	216.0	196.0
6. Railway wagons	'000 numbers	2.9	15.3	11.9	33.5	14.9
7. Automobiles	"	16.5	25.3	55.0	70.7	79.8
8. Power Driven Pumps	"	35.0	37.0	109.0	244.0	333.0
9. Diesel Engines (Stationary)	"	5.5	10.4	44.7	93.1	133.4
10. Electric Motors	'000 H.P.	99.0	272.0	728.0	1753.0	2296.0
11. Nitrogenous fertilisers (N)	'000 Tonnes	9.0	80.0	101.0	232.0	716.0
12. Sulphuric Acid	"	101.0	167.0	368.0	662.0	1129.0
13. Soda Ash	"	45.0	82.0	152.0	331.0	427.0
14. Caustic Soda	"	12.0	36.0	101.0	218.0	361.0
15. Paper and Paper Board	"	116.0	190.0	350.0	558.0	724.0
16. Cement	Million Tonnes	2.7	4.7	8.0	10.8	13.8
17. Refined Petroleum Products	"	0.2	3.4	5.8	9.4	16.6
18. Jute Textiles	1000 Tonnes	837.0	1071.0	1097.0	1302.0	944.0
19. Cotton yarn	Million Kgs.	534.0	744.0	801.0	907.0	961.0
20. Cotton cloth (Total)	Million Metres	4215.0	6260.0	6738.0	7440	7753
(1) Mill sector	"	3401.0	4665.0	4649.0	4401	4192
(2) Decentralised sector	"	814.0	1595.0	2089.0	3039	3561
21. Sugar	'000 Tonnes	1134.0	1890.0	3029.0	3510	4261
22. Tea	Million Kgs.	277.0	308.0	322.0	376.0	401
23. Electricity Generator	Billion K.W.H.	5.3	8.8	17.0	33.0	51.4

Notes : (i) Sugar production relates to sugar season, i.e., November to October up to 1966-67 and October to September thereafter.  
(ii) Electricity generated relates to Public utilities only.

SOURCE : Economic Survey 1970-71, pp. 94-99.

## APPENDIX 9

(Chapter 10)

## SHARE OF IMPORTS IN TOTAL ESTIMATED SUPPLIES

(a) Total estimated supplies.  
(b) Percentage of imports to total estimated supplies.

S. No. 1	Commodity 2	Unit of Account 3	1950-51 4	195-56 5	1960-61 6	1965-66 7	1967-68 8	1968-69 9	1969-70 10
1.	Foodgrains . .	(Million tonnes)	(a) 60.6 (b) (5.9)	71.9 (1.7)	84.5 (4.7)	86.9 (9.7)	95.7 (8.2)	101.9 (5.6)	101.3 (4.4)
2.	Raw cotton . .	(Lakh bales of 180 kgs.)	(a) 39.9 (b) (27.8)	49.6 (12.3)	58.4 (16.4)	64.3 (10.9)	67.2 (10.0)	69.9 (10.2)	68.3 (11.9)
3.	Raw Jute . .	(Lakh bales of 180 kgs.)	(a) 60.7 (b) (35.1)	51.8 (21.6)	54.8 (8.6)	64.0 (17.5)	55.8 (12.0)	51.6 (4.0)	45.7 (6.5)
4.	Sugar mill Machinery	(Rs. Lakhs)	(a) 100 (b) (100)	419 (95.2)	545 (.9.3)	776 (0.8)	862 (1.4)	1196 (3.8)	1299 (1.3)
5.	Textile machinery .	(Rs. Lakhs)	(a) N.A. (b) (N.A.)	1233 (67.6)	3361 (69.1)	5052 (56.8)	4367 (63.8)	3028 (52.1)	3029 (31.3)
6.	Machine Tools—metal working	(Rs. Lakhs)	(a) 295 (b) (89.8)	528 (84.8)	1990 (64.8)	6493 (61.8)	5915 (61.7)	4750 (62.1)	3880 (42.8)
7.	Iron and Steel .	('000 tonnes)	(a) 1391 (b) (25.2)	2162 (39.9)	37.5 (35.7)	5416 (16.7)	4519 (11.5)	4775 (9.3)	5202 (8.0)
8.	Aluminium . .	('000 tonnes)	(a) 14.7 (b) (72.8)	23.5 (68.5)	43.7 (58.1)	82.4 (24.6)	139.2 (27.9)	135.1 (7.2)	137.6 (1.8)
9.	Soda Ash . .	('000 tonnes)	(a) 75 (b) (40.0)	154 (46.7)	251.6 (39.6)	366.7 (9.7)	375.0 (1.1)	399.0 (Neg.)	427.2 (Neg.)

1	2	3	4	5	6	7	8	9	10	
10.	Caustic soda .	( '000 tonnes)	(a) (b)	34 (61.7)	96 (62.5)	139.8 (27.7)	292.2 (25.4)	286.1 (2.8)	313.8 (0.2)	360.3 (Neg.)
11.	Bleaching powder .	( '000 tonnes)	(a) (b)	9.4 (61.7)	8.2 (61.0)	7.7 (20.8)	9.2 (20.6)	9.5 (7.4)	13.0 (10.0)	15.3 (Neg.)
12.	Bicycles .	( '000 Nos.)	(a) (b)	264 (62.5)	661 (22.4)	1071 (Neg.)	1582 (Neg.)	1684 (Neg.)	1954 (Neg.)	1914 (Neg.)
13.	Sewing Machines .	( '000 Nos.)	(a) (b)	56 (41.1)	125 (11.2)	304 (0.3)	433 (0.7)	372 (0.5)	428 (0.1)	328 (0.3)
14.	Newsprint .	( '000 tonnes)	(a) (b)	76 (100)	84 (95.2)	96 (76.0)	115 (73.9)	113 (72.6)	146 (78.7)	193 (80.4)
15.	Paper and Paper Boards etc.	( '000 tonnes)	(a) (b)	151 (23.2)	260 (26.9)	378 (7.4)	584 (4.5)	677 (2.5)	674 (2.1)	737 (1.8)
16.	Ammonium Sulphate	( '000 tonnes)	(a) (b)	423 (88.9)	607 (34.1)	755 (47.3)	1273 (67.0)	1459 (72.1)	1841 (68.2)	1399 (56.5)
17.	Man-made fibre and yarn	( '000 tonnes)	(a) (b)	N.A. (N.A.)	31.9 (20.7)	84.2 (25.4)	125.5 (6.0)	149.3 (2.9)	173.6 (2.9)	169.3 (2.5)

- Notes :—* (1) In case of raw cotton and raw jute the total estimated supplies relate to their respective crop/agricultural years. For foodgrains total supplies have been estimated on the basis of production for agricultural years and imports on financial years.
- (2) In the case of foodgrains, raw cotton and raw jute the figures are three year moving average of a year before, the year concerned and a year after ; except for 1969-70 where the average refers to two years 1968-69 and 1970, in respect of foodgrain and raw Jute only.
- (3) Imports of Ammonium sulphate relate to those imported for Central Fertilizer Pool.
- (4) Textile machinery excludes jute textile machinery.
- (5) For man-made fibre and yarn, production relates to calendar years and imports to fiscal year.
- (6) For Sugarmill machinery, textile machinery and machine tools (metal working) the import portion of estimated supplies in 1967-68, 1968-69 and 1969-70 is in post-devaluation parity for the rupee.
- SOURCE :—*Economic Survey, 1970-71*, pp. 148-49.

## APPENDIX 10

(Chapter X)

### IMPORTS, EXPORTS AND BALANCE OF TRADE

<i>Year</i>	<i>Imports</i>	<i>Exports</i>	<i>(Value in Rs. Lakhs)</i> <i>Balance of Trade</i>
1951-52	970,03	732,94	—237,09
1955-56	678,84	596,32	— 82,52
1956-57	840,58	604,45	—236,13
1960-61	1139,69	660,22	—479,47
1965-66	1394,05	809,55	—584,50
1968-69 (2)	1908,63	1357,87	—550,76
1969-70	1567,49	1413,21	—154,28
<i>Average</i>			
First Plan	723,40	605,86	—117,54
Second Plan	976,45	609,25	—367,20
Third Plan	1241,73	762,48	—479,25

SOURCE : (1) Compiled from the various issues of Basic Statistical Material issued by the Economic Adviser to the Government of India. (2) Figures of 1968-69 and 1969-70 are in terms of post-devaluation rupees.

## APPENDIX 11

(Chapter X)

### VALUE INDEX OF IMPORTS AND EXPORTS

#### Imports

(Base 1958 = 100)

<i>Year</i>	<i>General Index</i>	<i>Food</i>	<i>Beverages and Tobacco</i>	<i>Crude Material Except Fuel</i>	<i>Mineral Fuel and Lubricants</i>	<i>Animal and Vegetable oils</i>	<i>Chemicals</i>	<i>Manufactured Goods</i>	<i>Machinery and Transport Equipment</i>	<i>Misc. Manufactured Articles</i>	<i>Terms of Trade</i>
	1	2	3	4	5	6	7	8	9	10	11
1951	109	...	...	...	...	...	...	...	...	...	...
1956	99	...	...	...	...	...	...	...	...	...	...
1961	99	96	98	93	93	99	86	101	106	106	111
1965	102	92	94	116	76	114	64	107	130	119	110
1966	153	145	156	192	112	166	88	158	214	172	114
1967	153	152	164	187	100	138	91	173	245	89	111
1968	145	151	156	172	111	117	84	179	243	112	112
1969	148	162	177	166	104	123	78	177	208	167	112

#### Exports

<i>Year</i>	1	2	3	4	5	6	7	8	9	10
1951	152	...	...	...	...	...	...	...	...	...
1956	101	...	...	...	...	...	...	...	...	...
1961	111	94	100	105	91	104	201	122	92	96
1965	112	110	109	88	110	147	151	128	76	131
1966	174	174	175	129	160	126	257	208	84	205
1967	170	168	168	126	178	198	264	204	78	196
1968	163	164	188	123	191	181	268	188	91	200
1969	174	166	189	131	171	167	283	210	99	204

Note : Figures after 1965 are calculated in terms of post-devaluation rupees.

SOURCE : *Monthly Abstract of Statistics*, February 1971.

# APPENDIX 12 (Chapter XII) 1.1 : CONVENTIONAL\* ESTIMATES OF NET NATIONAL PRODUCT (i.e. NATIONAL INCOME)

Year	Net National Product (Rs. crores)		Per capita net national product (Rs.)		Index number of net national product (1948-49=100)		Index number of per capita net national product (1948-49=100)	
	At current prices		At 1948-49 prices		At current prices		At 1948-49 prices	
	2	3	4	5	6	7	8	9
1								
1948-49	...	8650	249.6	249.6	100.0	100.0	100.0	100.0
1949-50	...	8820	256.0	250.6	104.2	102.0	102.6	100.4
1950-51	...	8850	266.5	247.5	110.2	103.3	106.8	99.2
1951-52	...	9100	274.2	250.3	115.3	105.2	109.9	100.3
1952-53	...	9460	285.4	255.7	113.5	109.4	106.3	102.4
1953-54	...	10030	278.1	266.2	121.2	116.0	111.4	106.7
1954-55	...	10280	250.3	267.8	111.1	118.8	100.3	107.3
1955-56	...	10480	255.0	267.8	115.4	121.2	102.2	107.3
1956-57	...	11000	283.3	273.6	130.8	127.2	113.5	110.4
1957-58	...	11390	279.6	267.3	131.7	125.9	112.0	107.1
1958-59	...	12600	303.0	280.1	145.7	134.7	121.4	112.2
1959-60	...	11860	304.8	279.2	149.7	137.1	122.1	111.9
1960-61	...	12730	326.0	293.2	163.6	147.2	130.6	117.5
1961-62	...	13060	332.9	294.3	170.9	151.0	133.4	117.9
1962-63	...	13300	339.0	293.1	177.8	153.8	135.8	117.4
1963-64	...	13950	370.7	300.6	198.8	173.2	148.5	120.4
1964-65	...	20400	429.7	315.6	235.8	173.2	172.2	126.4
1965-66	...	14700	426.2	302.7	239.3	189.9	171.8	121.3
1966-67(P)	...	23670	477.3	301.4	273.6	173.2	190.8	120.8
1967-68(P)	...	27630	542.3	323.3	319.4	190.3	217.3	129.5
1968-69(P)	...	27930	N.A.	N.A.	322.9	195.5	N.A.	N.A.
Annual Growth Rate	During							
First Plan	0.9	3.9	—0.9	1.6				
Second Plan	7.3	4.0**	5.1	1.8**				
Third Plan	7.9	2.9	5.5	0.7				

(P) Provisional.

\* Estimates are described as "conventional" to distinguish them from the "revised" series.

\*\* The estimates of production of foodgrains from 1959-60 and those of sugarcane from 1960-61 are not strictly comparable with those for the earlier years. Adjusted for such statistical changes, the annual increases in total national income and in per capita income during the second plan period works out to 3.8 per cent and 1.7 per cent respectively.

N.A. Not available.  
Source : *Economic Survey 1970-71*, p. 77.

## APPENDIX 13

(Chapter XII)

### CONVENTIONAL ESTIMATES OF NET NATIONAL PRODUCT BY INDUSTRY OF ORIGIN—PERCENTAGE DISTRIBUTION

(At 1948-49 Prices)

<i>Industry Groups</i>	1948- 49	1950- 51	1955- 56	1960- 61	1965- 66	1966- 67*	1967- 68*	1968- 69 *
1	2	3	4	5	6	7	8	9
1. Agriculture, animal husbandry and ancillary activities @	49.1	49.0	47.9	46.4	38.8	38.7	41.1	40.0
2. Mining, manufacturing and small enterprises	17.1	16.7	16.8	16.6	18.3	18.0	16.5	16.7
3. Commerce, transport and communication	18.5	18.8	18.8	19.2	20.4	20.2	19.3	19.4
4. Other Services @@	15.5	15.7	16.5	18.2	23.3	24.4	24.4	25.1
5. Not Domestic Product at Factor Cost	100.2	100.2	100.0	100.4	100.8	101.3	101.3	101.2
6. Net Factor Income from Abroad	-0.2	-0.2	0.0	-0.4	-0.8	-1.3	-1.3	-1.2
7. Net National Product at Factor Cost	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

@Including forestry and fishery

@@Comprising professions and liberal arts, Government services (Administration), domestic services and house property.

\*Provisional.

SOURCE : *Economic Survey 1970-71*, p. 71.



## APPENDIX 14

(Chapter XII)

### PER CAPITA AVAILABILITY OF CERTAIN IMPORTANT ARTICLES OF CONSUMPTION (PER YEAR EXCEPT FOOD GRAINS)

<i>Year</i>	<i>Food Grains Per day (In grams)</i>	<i>Edible oils (Kgs.)@</i>	<i>Vanaspati Kgs.</i>	<i>Sugar Nov.-Oct. (Kgs.)</i>	<i>Cloth (Metres)</i>
1	2	3	4	5	6
1950-51	394.9	2.7	N.A.	3.0	11.00
1955-56	430.6	2.5	0.7	5.0	14.40
1960-61	467.8	3.2	0.8	4.7	15.00
1961-62	463.1	3.2	0.8	5.7	15.90
1962-63	442.0	3.1	0.8	5.4	15.50
1963-64	448.9	2.7	0.8	4.9	15.80
1964-65	475.9	3.6	0.8	5.0	16.70
1965-66	403.7	2.6	0.8	5.6	16.30
1966-67	396.0*	2.6	0.7	5.1	15.40
1967-68	452.1*	3.2	0.8	4.2†	15.10
1968-69	437.4*	2.4	0.9	4.9	16.00
1969-70	445.2*	2.6*	0.9*	6.1*	15.30*

\*Provisional.

@Include groundnut oil, rapeseed and mustard oil, coconut oil, and sesamum oil, but excludes oil used for manufacture of vanaspati.

@@Relate to calendar years; figures for 1955 are shown against 1955-56 and so on.

†From 1967-68 the sugar season is Oct.-Sep.

SOURCE : *Economic Survey 1970-71*, pp. 88 and 90.

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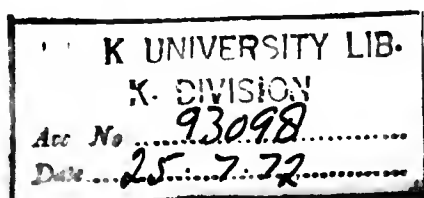
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